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Indian - Horizon

Vol 33

1984

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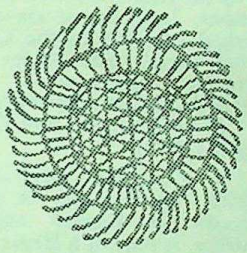

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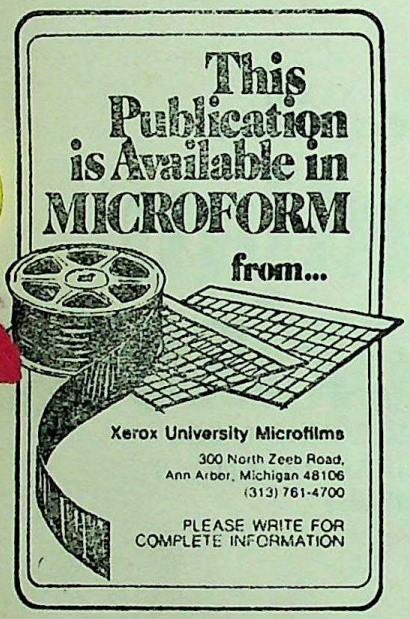

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CONTRIBUTORS

Dilip K. Chakrabarti
Reader in Archaeology, University of Delhi; has earlier been associated with the universities of Calcutta, Cambridge, Edinburgh, Visva-Bharati, researched in Iran and the United States, publishing plenteously in professional journals; edits *Man and Environment*.

A. Ranganathan
science writer, art critic, man of letters, concerned especially with the aesthetic relations of art and physics; has written on Raman and the physical theory of musical instruments, physicists and the dialogue of cultures; author of *A Coomaraswamy Spectrum*, *Glimpses of Nehru*.

Krishna Chaitanya
historian of literature, critic of arts, thinker; has published, among numerous works, a ten-volume history of world literature, histories of Sanskrit drama and Indian painting and, most recently, *Freedom and Transcendence*, last of a pentalogy on the philosophy of freedom.

Vrinda Nabar
Reader in English, University of Bombay; has written a doctoral dissertation on Indian English poetry, contributed papers on the subject including an essay on Daruwalla in *Indian Poetry in English: A Critical Assessment*; has translated, with Nissim Ezekiel, Marathi verse into English.

Vinay Srivastava
Lecturer in sociology—Hindu College, University of Delhi; currently engaged in research on charisma-building in Chinese society ; has published in *Current Anthropology*, *Spectra of Anthropological Progress*.

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CONTRIBUTORS to this issue

Rajiv Gandhi
Prime Minister of India

Kamaladevi Chattopadhyay
Pioneer in crafts promotion, cooperatives, theatre; recipient of the Magsaysay Award for work in community development; author of several books, among them *Handicrafts of India, Tribalism in India, etc.*

R.K. Dasgupta
Formerly Director, National Library, Calcutta; Tagore Professor of Bengali, Delhi University; Dean, Faculty of Arts and Head of the Department of Modern Indian Languages, Delhi University; Vice-President, International Federation of Modern Languages and Literature; Visiting Professor of Comparative Literature, University of Alberato, Canada; awarded Calcutta University's Gold Medal in 1972 for research in Bengali literature

H.Y. Sharada Prasad
Information Adviser to the Prime Minister of India

Keki Daruwalla
Poet and prose-writer in English; books of poetry include *Under Orion, Apparition in April, Crossing of Rivers, The Keeper of the Dead*; has also published a collection of short stories, *Sword and Abyss* and edited *Two Decades of Indian Poetry : 1960-80*, an anthology of Indian English verse; winner of the Sahitya Akademi Award

Ganga Prasad Vimal
Lecturer in Zakir Husain College, Delhi University; publications include *Vijap* (poetry); *Apne se Alag, Marichika and Mrigantak* (novels); *Ateet men Kuch* (short stories); *Samakalin Kahani ka Rachana Vidhan* (literary criticism)

Muriel Wasi
Educationist and literary critic; has taught English for many years in the University of Delhi; author of *Too High for Rivalry* (a novel) and other publications

Sunita Jain
Reader in English at the Indian Institute of Technology, New Delhi; winner of the Vreeland Award, the Marie Sandoz Prairie Schooner Fiction Award, and a UP Govt. Award; writes fiction and poetry in Hindi and English

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Pre-industrial Indian Iron

Dilip K. Chakrabarti

The tradition of iron and steel manufacture by indigenous craftsmen was extant all over India till the end of the nineteenth century. Though now extinct, except perhaps among a few isolated groups in the Chhotanagpur plateau of Bihar, this tradition merits serious attention from historians of Indian technology. In the first place, the iron and steel produced indigenously were acknowledgedly among the best in the world; with the onset of the Industrial Revolution in Europe, scientific experiments were undertaken specifically to examine the properties of pre-industrial Indian iron and steel. Secondly, the tradition embo ies—technologically—the history of Indian iron right from its beginnings in the second half of the second millennium BC. Not much data can be available on the process of iron manufacture, and that of iron implements, in early India. But the processes of pre-industrial iron and steel manufacture, which have been studied and recorded, illuminate both the early processes and aspects of the tradition's continuity. Thirdly, to anybody interested in studying the level of iron technology and production in modern India, the data on pre-industrial iron and steel manufacture as recorded in different parts of India in the nineteenth century and earlier possess a great deal of historical significance[1].

*

The claim that pre-industrial Indian iron and steel were among the best in the world is not an empty one. Among other things, it has been mentioned that the Westphalians (possibly in the eight-

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eenth century) used to "roll puddled steel into ½ in. or ¾ in. squares and sell it in Hamburg under the name of Indian steel. . ."[2]. In his memoir *On Methods of Recognizing Defects and Good Quality in Steel and on Several Ways of Comparing Different Grades of Steel*, in 1722, the French scholar R. A. F. de Reaumur writes that on the order of the Duke of Orleans, the French Consul in Cairo, M. le Maire, sent him specimens of steel of which Damascus swords were supposed to have been made. And,

> Among the steels which I received from him, and which he assured were the best, there is the cake which is supposed to be steel from India and the kind to be rated most highly in Egypt.[3]

Reaumur could find "no artisan in Paris who succeeded in forging a tool out of it".

In this connection, it may be mentioned that the "figure" of the famous Damascus sword-blades was attributed to Indian steel by Henry Wilkinson in 1836 :

> This is the kind of steel that has always been employed for these blades so celebrated for their beauty, and I consider that it would be as impossible to forge a sword-blade out of some of these materials, when properly steeled, without obtaining the true Damascus figure as it would be to imitate the pattern by any contortions of iron or steel artificially. These cakes of steel are evidently crystallized, and the future pattern of the sword-blades depends on the size and arrangement of the crystals, modified by so many circumstances, that it is not surprising the proper kind of steel for this purpose should be so rare, or that the secret should have been supposed to be lost.[4]

Wilkinson's finds, in fact, were categorical:

> . . . from whatever cause or combination of circumstances it may arise, it may be rendered self-evident that the figure or pattern, so long sought after, exists in the cakes of *wootz* or native steel of India, and only requires to be produced by the actions of diluted acids.[5]

In 1818 James Stodart wrote on the fitness of Indian steel (or *wootz* as it was called, after the Kannada term *ukku* for steel[6]) "for making surgical instruments and other articles of fine cutlery", arguing that when properly heated, it was "vastly superior to the best cast-steel of Europe"[7].

In 1820 H. Voysey found Persian traders at Kona Samudram—south of the Godavari, in Andhra—purchasing locally made steel:

> The export, however, of the metal to Persia must be profitable, as it is sufficient to bring dealers from that country and to defray the cost and risk of

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travelling. We found at the village in 1820, Haji Hosyn, from Ispahan, engaged in the speculation; and it must have answered his purpose, as he was here again in 1823, having returned in the interval to Persia and disposed of the venture. He informed us that the place and the process are both familiar to the Persians, and that they have attempted to imitate the latter without success.[8]

For later records one may turn to different *District Gazetteers*, and here we choose the observation on the Kangra and Mandi iron industry in the gazetteer of Kangra district, 1883–84:

The ore . . . is of the same nature as the products of the best mines of Sweden, and it is worked, as there, at its outcrop in open quarries. It is one of the most valuable ores of iron, being readily reduced, in contact with charcoal, in furnaces of the simplest construction, and yielding the very best quality of iron. Some of the metal . . . was sent to England in 1858 for obtaining an estimate of its value . . . While best English iron yielded at a pressure of about 56,000 lbs. on the square inch, the Kangra iron in the state in which it was sent . . . required a force of 61,3000 lbs. per square inch to break it.[9]

The reputation of pre-industrial Indian iron and steel may also be brought home by referring to some of the professional metallurgical comments on the famous fourth-century AD iron pillar of Delhi. James Swank, Secretary and General Manager of the American Iron and Steel Association between 1872 and 1892, considered its forging process a mystery[10]. In 1911 I. Lester pointed out that this pillar, "until within, say 30 to 40 years ago, was the heaviest known piece of wrought iron in the world"[11]. As late as 1930 H. L. Brose could write:

. . . only a short while ago it was admitted at a meeting of the Iron and Steel Institute at Birmingham that in spite of modern scientific progress the metal of the 1600-year-old pillar at Delhi . . . was still superior to anything we could produce today; it was freer from intrusions than even Swedish charcoal iron.[12]

*

The first scientific experiment on *wootz* was published by George Pearson of the Royal Society in 1795. The experiment was undertaken on specimens of *wootz* which "were in the shape of a round cake, of about five inches in diameter, and one thick", each weighing somewhat more than two pounds. The specimens were sent to the President of the Royal Society by Dr Helenus Scott of Bombay with the request that "an enquiry . . . be instituted to obtain further knowledge of its nature"[13].

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Pearson's conclusion that *wootz* was directly made from ore was disproved by David Mushet who first published on the subject in 1805 and then in 1840:

> Wootz steel is never formed directly from the ore, but by the fusion of fragments of small bars of malleable iron, in a crucible with woody carbonaceous matter, as practised by myself long before a knowledge of this fact—which was so late as in the year 1825—first reached me.[14]

In 1819 Michael Farraday tried to find out if *wootz* contained any substances other than iron and carbon[15]. *Wootz* was also analysed by J. R. Breant, Inspector of Assays at the Paris Mint, in 1823[16]. This experimental interest in *wootz* has been explained by Robert Hadfield:

> . . . ***wootz*** . . . was in many respects superior to anything that the steel makers of western Europe had hitherto produced. The investigation of its properties and the attempt to imitate them was a very commendable research . . .[17]

*

The basic sources of this study are different nineteenth-century records referring to pre-industrial iron-smelting—travellers' records, Geological Survey of India *Memoirs* and *Records*, and occasional metallurgical publications. Many of these discussions later on found a place in various *District Gazetteers*. Perhaps the most convenient introduction to the theme is the section on iron in Valentine Ball's manual of the economic geology of India published in 1881. Ball's intention was quite clear:

> As will be abundantly shown in the course of the following pages, the manufacture of iron has in many parts of India been wholly crushed out of existence by competition with English iron, while in others it is steadily decreasing and it seems destined ultimately to become extinct. For this reason alone, if there were no others, the native process is worthy of full notice here . . .[18]

The distribution of smelting centres is obviously related to the distribution of suitable ores. The first point to remember in this context is that the pre-industrial iron-smelters could get iron not merely from the large and well-known deposits but also from ferruginous laterite and quartz-iron-ore schist[19]. The ores suitable for pre-industrial iron-smelting occur, in fact, all over the Indian subcontinent outside the major alluvial stretches. This distribution includes Sind, Baluchistan, the north-west frontier zone, Kashmir,

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the Salt Range and Kot Kerana hills of Punjab, the Uttar Pradesh and Punjab Himalayas, Patiala, Rajasthan, Gujarat, central India, Maharashtra, Mysore, Kerala, Tamil Nadu, Andhra Pradesh, Orissa, West Bengal, Assam, Bihar and Mirzapur in Uttar Pradesh[20].

According to Ball's list, which is doubtless the most comprehensive list available, pre-industrial iron-smelting has been reported from the following districts, regions and former territories: Travancore state, Madura, Thiruchirapalli, Coimbatore, Salem, North and South Arcot, the Malabar and Nilgiri regions, Chingleput, Tumkur, Mysore proper, Shimoga, Kadur, Chitaldurg, Cuddapah, Kurnul, Bellary, Krishna and Godavary districts, Hyderabad state, Vizagapatnam, Balasore, Talcher, Mayurbhanj, Birbhum, Bankura, Burdwan, Purulia, Monghyr, Singhbhum, Hazaribagh, Lohardaga, Palamau, Ranchi, Dhanbad, Sambalpur, Bilaspur, Raipur, Mandla, Bhandara, Balaghat, Jabalpur, Narsinghpur, Chanda, Mirzapur, Rewa, the Bundelkhand region, Banda, Lalitpur, Panna, Gwalior, Alwar, Jaipur, Ajmer, Udaipur, Nimar and Malwa, Ratnagiri, Satara, Surat, Kolhapur, Sawantwari state, Panchmahal, Kaira, Rewa Kantha, Ahmedabad, Kathiawar, Kutch, Sind, Bannu, Peshawar, Salt Range, Kot Kerana, Kangra, Mandi, Kulu, Sirmur, Gurgaon, Kumaon-Garhwal, Assam and the Khasi and Jaintia hills [21].

Anybody who has done field-work in any of these areas knows that the slag-heaps left by the pre-industrial iron-smelters are among their commonest topographic features.

*

One of the most systematic discussions of pre-industrial iron-smelting processes in India may be found in John Percy's *Metallurgy: Iron and Steel*, published in 1864 [22]. Percy isolates three basic types of pre-industrial smelting furnace. The first was the simplest and also the most common. Circular in form, its height varied from two to four feet. At the bottom, or across the hearth, the width was from ten to fifteen inches, and at the top from six to twelve inches. It was made entirely of carefully tempered clay. The lower part tended to wear away rapidly and was constantly repaired with linings of fresh clay. There were two openings towards the bottom of the furnace—one for removing the cinder, and the other for drawing out the smelted product, or sponge-iron. Through the second opening two earthen pipes, or tuyeres, connected with a pair of bellows, were inserted. Both the openings were covered with clay before the furnace was lit. The opening for the cinder was

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generally at the side, that for the sponge-iron and the tuyeres was in front. The tuyeres, some twelve inches long and an inch in internal diameter, were placed side by side, projecting two to three inches into the furnace, three to four inches from its bottom.

If the furnace was newly built, it was first dried—a fire was kept going in it for several hours. The tuyeres were then placed, in the positions mentioned above, and the openings both at side and front stopped with clay. The furnace was *half* filled with charcoal and lighted, then filled up to the top. The bellows were applied at this stage. When the charcoal at the top had partly subsided, alternate charges of ore and charcoal were applied till the requisite amount of ore had been introduced. The blast from the bellows was then increased to the maximum and kept there till the operation was complete. This took four to six hours, during which the cinder was removed from time to time with the help of a small rod or bar through the opening devised for that purpose. But still the greater part of the cinder remained in the furnace and was removed with the sponge-iron, which was taken out at the end of the operation, taking off the front cover. If sufficiently hot, the sponge-iron was immediately hammered into a tolerably sound bloom, and if it came out too cold for the purpose, it was reheated and hammered.

The second type of furnace was a cavity made in a bank of clay, well-tempered. The cavity was cylindrical, fifteen to eighteen inches in diameter, and some two and a half inches deep or high At the bottom were two openings facing each other, through one of which the tuyeres were inserted. A row of such furnaces could be made at convenient distances from each other in a bank of clay—a distinct advantage the type offered. The furnace was filled with charcoal and lit in the manner previously described, alternate charges of ore and charcoal applied, and the bellows kept going at full blast. When the cinder reached a certain height in the furnace, it was tapped with an iron bar inserted through the front opening. The smelted ore was first shaped into a ball with an iron bar introduced from above, then taken out with tongs through the top again. The ball removed, the cinder was also completely removed by tapping through the front opening. The furnace was then ready for the next charge of ore and charcoal. The lower part of the furnace did not have to be (indeed, could not be) removed for a fresh charge, which saved time and was an improvement upon the first type of furnace. According to Percy, this was "in fact a small Catalan furnace".

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The third type of furnace mentioned by Percy was also a cavity scooped out in the side of a clay mound. Its height on the outside was eight to ten feet but inside, the furnace was only six to seven feet high, the bottom being two to three feet above ground level. The internal diameter, top to bottom, was eighteen inches square, but a variation of fifteen by twenty-one inches was also known. The front wall was only five to six inches thick and could be removed at pleasure. When it was removed the furnace presented the appearance of a vertical trench cut in a mound of clay. The base of the furnace was provided with a perforated tile of dried clay placed at an angle of forty-five degrees to the back of the furnace.

The base tile or plate was first positioned and cowdung deposited up to a height of twelve inches—four to five inches above the upper edge of the plate. Above this bed of cowdung two earthen tuyeres, at least eighteen inches long, were introduced, almost touching the back of the furnace. The furnace was then partly filled with charcoal, lighted, then filled up to the top. The blast was applied from the front and the man working the bellows sat upon a sort of scaffold two to three feet from the ground. Ore and charcoal were then alternately introduced and the whole operation took twelve to sixteen hours. A considerable quantity of cinder was tapped at intervals during the operation with an iron bar passed through the perforations in the base plate, beginning with the lower holes and then proceeding to the upper ones. The holes through which the cinder had been drawn were stopped with clay as the iron accummulated at the bottom and would otherwise escape. When the iron rose to the level of the tuyeres and the tuyeres were burnt away, the smelting was considered complete. The base plate was then removed with an iron bar and the mass of cinder and iron allowed to fall to the ground. This lump of iron weighed a hundred and fifty to two hundred pounds, and was thus too large to be hammered whole. So it was cut by means of a sharp-edged sledge, so that when cold it could be broken into four pieces. It consisted of a mixture of malleable iron and natural steel, and their proportion depended on the nature of the ore. It has however been pointed out by Percy that when the object was to produce steel a large proportion of charcoal was employed and a gentle blast applied:

> The steely parts frequently present the same appearances on fracture as the best blister steel from Swedish iron; and they are carefully selected and prepared for use by being heated to a low red heat in a charcoal fire and then cut into small pieces of convenient size for making edge-tools, etc. When iron is wanted

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instead of steel, the pieces into which the lump has been broken are raised to a welding heat and hammered into bars, by which means it loses almost all appearance of steel. Sometimes small quantities of cast-iron are produced in this furnace to the great annoyance of the smelters who have much difficulty in separating it from the rest of the iron. They consider that in this case the iron has been injured by raising the temperature of the furnace too high.[23]

The third type of furnace was thus obviously used to make better-grade iron and natural steel.

*

A close study of records from different parts of the country reveals that there were regional variations of each of the three types of furnace here described. The variations are not important except in detail. However, in 1963, H. F. Cleere (then Assistant Secretary, Iron and Steel Institute, Britain) reported two types which do not seem to have been reported before[24]. A demonstration of primitive Indian iron-making was staged at the National Metallurgical Laboratory, Jamshedpur, in February of that year, and Cleere saw three types of furnace in operation then. These furnaces were called, after the three village associated with them, the Kamar Joda furnace, the Single Becha furnace and the Jiragora furnace. The last conforms to the first type described by Percy and does not call for further discussion.

The Kamar Joda furnace consisted of a shallow bowl, about a foot in diameter and six inches deep, excavated in the earth and lined with clay. A mound some eighteen inches high was erected above the bowl, extending two feet or so behind it. A shaft, three to four inches in diameter, was made immediately above the centre of the bowl, the front of which was open. The structure was entirely of puddled clay mixed with chopped straw or husk. It was dried in the sun and the cracks were lined with fresh clay. When the furnace was ready for operation, the bowl was filled with charcoal and the next step was to close the open front with damp sand, probably bonded with a little puddled clay. A tuyere was inserted through the sand-wall and the blast applied through twin foot-operated bellows. Some thirty pounds of ore were charged with an equal amount of charcoal. When the charge had been used up, the sand-wall was broken open and the bloom, a mass of slag and iron with much adhering unreduced ore and charcoal, dragged out with tongs and quenched with water. The bloom was then battered with a hammer and the small fragments of metal picked up by hand.

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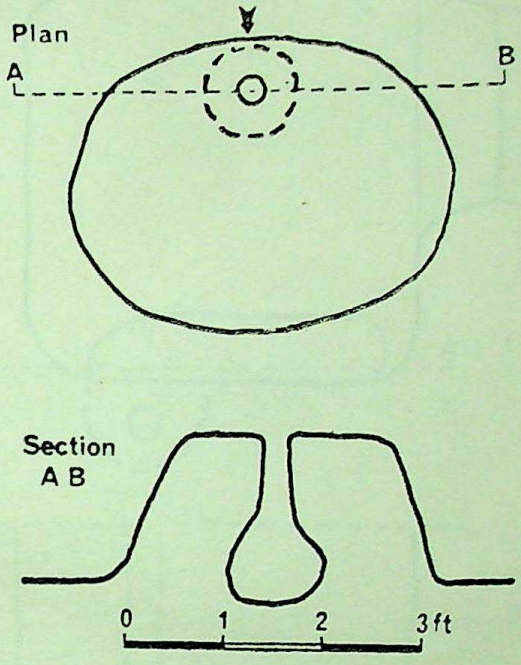

FIG. 1 The Kamar Joda furnace (after Cleere)

These bits of iron were then reheated and forged together. Cleere points out that in this type of furnace temperatures did not exceed approximately 1100 degrees Centigrade and the metal was never molten during the process. As the ore was reduced to metal it became plastic and very slowly travelled down the furnace, forming globules of varying sizes. There was almost no accretion of carbon at the low temperatures encountered, and the charcoal used as fuel did not introduce sulphur or phosphorus in the metal. So the result was a very pure iron. An ingot of two pounds, approximately, was obtained from thirty pounds of ore. The Kamar Joda furnace has been described as a furnace of the most primitive type, because it had no provision for tapping of slag. The metal tended therefore to scatter in small discrete particles throughout the slag matrix, which had to be broken open to obtain the metal.

The first step in building the Single Becha type of furnace was to dig a pit, some four feet square and three feet deep, with steps leading down to it. A bowl, a foot in diameter and nine inches deep, was then dug in the floor of the pit, the bowl extending in part beyond one of the side-walls. The next step was to dig a shaft,

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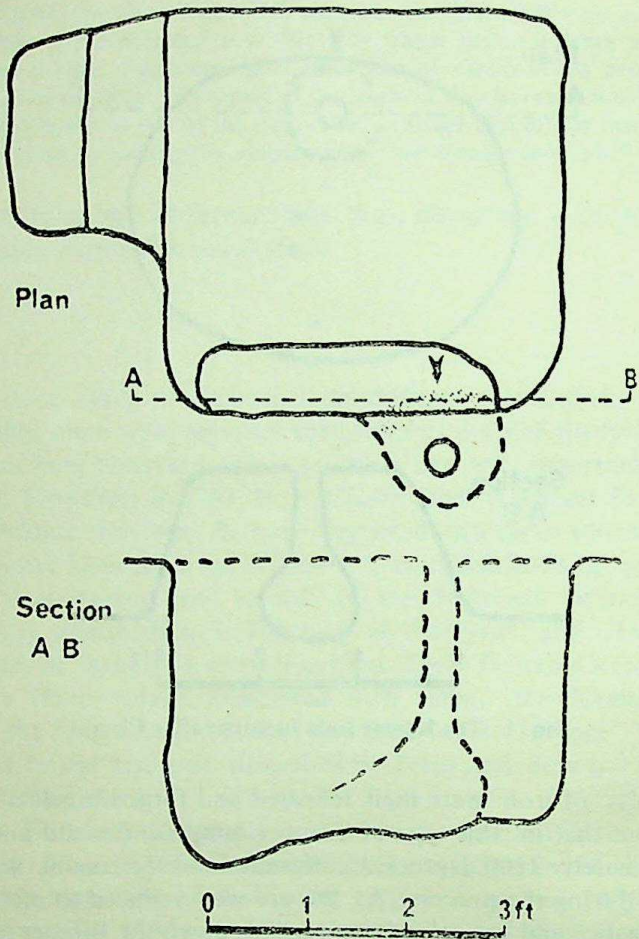

FIG. 2 The Single Becha furnace (after Cleere)

three to four inches in diameter, immediately over the centre of the bowl. For tapping the molten slag a pit was dug out of the bowl, sloping downwards. This slag-pit lay inside the main pit. Hearth, shaft and slag-pit were lined with puddled clay mixed with chopped straw or husk and sun-dried, the cracks filled later with fresh clay. When the furnace was ready for operation, a sand-wall was built totally covering the hearth, and a tuyere inserted and twin foot-operated bellows (worked in the pit) applied. When the furnace was in operation, the operator probed the hearth at intervals through the tuyere with an iron rod. When the end of the rod showed slag the sand-wall blocking the slag pit was pulled down and the molten

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slag allowed to run out and collect in the pit, where it was quenched with water before being thrown out. This was done a number of times till the end of the operation. The spongy mass of iron was then taken out and after hammering off the adhering slag it was reheated or forged. The major advantage this furnace offered over the Kamar Joda furnace was that the tapping of the slag made for a greater coherency of the iron, and consequently less difficulty in manipulation for forging and shaping.

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It would now seem that more than three basic types of furnace (as postulated by Percy) were employed in primitive Indian iron-making. The parallels of the Kamar Joda furnace and the Single Becha furnace need further scrutiny on the basis of published records in different parts of India.

Certain general features may be observed at this stage. Ore, before being put in the furnace, was carefully sifted and reduced to the size of small peas. In some cases ore was roasted to increase its ferrous content. Charcoal of *sal* (*shorea robusta*) wood was considered the best but sometimes even bamboo charcoal was used. Bellows were of different types but usually conformed to the simple bellows that one can see in operation among Indian blacksmiths even today. In areas where the first type (of Percy's types) of furnace was used the whole enterprise was a family business with hardly any division of labour. The smelters very often used to wander around, collecting ores locally, and catered to the needs of the villages of the region. Furnaces of the second and third types were usually found in villages inhabited primarily by iron-smelters, and there the miners, charcoal-burners, smelters and blacksmiths formed distinct occupational classes. Production statistics are difficult to obtain, but even using the first type of furnace it was possible to obtain ten to fifteen pounds of iron in a working day. Usually no flux was used in smelting.

A graphic account of the economic condition of the Agaria iron-smelters of the Chhotanagpur plateau comes from Valentine Ball, writing in 1880. The sponge-iron, before being hammered into a bloom, was locally called *giri*. Occasionally the Agarias themselves produced the bloom and fashioned agricultural implements and other products, but quite often they sold the *giri* to the blacksmiths who then made the bloom and manufactured implements:

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Four annahs, or six pence, is the price paid for an ordinary-sized *giri*, and as but two of these can be made in a very hard day's work of fifteen hours' duration, and a considerable time has also to be expended on the preparation of charcoal and ore, the profits are very small. The fact is, that although the actual price which the iron fetches in the market is high, the profits made by the Mahajans, or native merchants, and the immense disproportion between the time and labour expended and the out-turn, both combine to leave the unfortunate Aguriah in a miserable state of poverty.[25]

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The classic accounts of the manufacture of *wootz* or steel in south India are left by Francis Buchanan writing in 1807 [26] and Benjamin Heyne [27] in 1814. We prefer Heyne's account because of its clarity. He first saw the manufacture of steel in the Mysore territory, in a small village in the hills south-west of Chitaldurg, in the Talem pargana. To convert the locally smelted iron into steel, the iron was first cut into fifty-two pieces, each of which was then put in a crucible, together with a handful of dried branches of *tangedu* (*cassia auriculata*) and another of fresh leaves of *vonangady* (*convolvulus laurifolia*). The mouths of the crucibles were then sealed with red mud. After this the crucibles were placed in a circular pit with their bottoms pointing towards the centre. The pit was then filled with charcoal and lighted. The large bellows were kept blowing for six hours, which is as long as the operation took. The crucibles were then removed from the furnace, ranged in rows on moistened mud, and quenched with water. The steel was found in conical pieces at the bottom of the crucibles, whose shape they had taken. The upper or broader surfaces were often striated from the centre to the circumference.

Heyne saw steel-making in operation also at Kakerhally, a small village on the road from Bangalore to Srirangapatnam:

Before the iron is made into steel it is heated, and reduced into pieces of eight inches length, and two inches breadth, and half an inch in thickness. It is then still so brittle that it breaks under the hammer. Its grain is coarse and white. Twenty-eight rupees' weight of it is put into a crucible, and upon it a handful of the dried branches of cassia auriculata. This is covered with the green leaves of the convolvulus laurifolia. . . and the opening of the crucible is closed with a handful of loam.

The furnace consists of a hole in the ground about 11 foot deep; it is one foot broad where widest and $\frac{3}{4}$ foot at the opening. This hole is filled with charcoal, and in and about the opening of it seventeen crucibles are placed; these a 1c covered with a heap of charcoal, and bellows are kept playing on it until the contents of the crucibles are liquified . . . The operation seldom lasts longer

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than three hours; and is usually made four times in the course of the day, and three times in the night.[28]

*

Recent researches have more or less conclusively shown that around 1000 BC or a little earlier there were a number of iron-using foci in the subcontinent. These were the north-west frontier zone including Baluchistan and Kashmir; south-east Rajasthan; Malwa in Madhya Pradesh and Berar in Maharashtra; south India, particularly Karnataka; the upper Gangetic valley and its peripheral area; and eastern India. The data on the north-west frontier zone come from Pirak in the Kachhi plain of Baluchistan where the first use of iron may be dated to around 800 BC; period III sites of the Gandhara Grave Culture in the Peshawar-Swat belt, yielding a fragmentary iron piece dated to around 1000 BC ; and the site of Gufkral in Kashmir whose iron-yielding megalithic phase can be placed earlier than 1000 BC. The evidence from south-east Rajasthan is limited to the site of Ahar near Udaipur, datable around 1300 BC. In Malwa, sites like Nagda and Eran establish the first appearance of iron in the region's archaeological record in around 1000 BC, if not earlier. In the Nagpur region of Berar the megalithic graves which evidence use of iron belong to the eighth century BC or a period slightly later. In south India, two sites in Karnataka—Hallur and Kumarnahalli—show their first use of iron around 1000 BC, possibly somewhat earlier. In the upper Gangetic valley and its fringes iron occurs extensively at the painted-grey-ware level of *circa* 800 BC and goes back in all probability to the earlier black-and-red-ware stage. In eastern India iron slag has been found in the natural soil at the site of Bahiri in Birbhum district of West Bengal (950± 150 BC), and at Barudih in Singhbhum district of Bihar, an iron sickle dating to 1000 BC. It may be noted that all the dates here are radio-carbon dates, and when calibrated with the true historical dates, their range will be somewhat higher[29].

Indian literary data do not illuminate the problems of iron antiquity and metallurgy. It may however be noted that by the time of the *Śatapatha Brāhmaṇa* (c. 800–700 BC) iron was considered a common enough metal to be associated with the peasantry in the Gangetic valley[30].

It may therefore be stated in all fairness that iron in India can be traced back to the second half of the second millennium BC, although from *circa* 1000 BC the data get more elaborate.

Archaeological research in different parts of the world has

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also indicated that iron technology had a polycentric origin and that there is no reason to believe in the idea of its emanation from a single source. In the context of India an idea clearly acceptable now is that iron technology possibly emerged from the smelting technology of the preceding copper-using stage. Chalcopyrite, an important copper-ore type in India and widely used in that stage, contains a good amount of iron which comes out in the form of slag when chalcopyrite is smelted. A basic familiarity with the properties of iron may reasonably be assumed in the copper-using stage itself.

*

Aspects of continuity between early Indian iron and the pre-industrial iron discussed here have not been adequately studied, but the general indications are clear enough. The evidence of ancient iron-smelting furnaces (notably from the megalithic remains at Naikund near Nagpur, sixth to fourth centuries BC) clearly shows that these were almost identical with the comparatively modern pre-industrial furnaces. Upon reconstruction, the excavated iron-smelting furnace at Naikund is very much an example of the first type of furnace described by Percy. Moreover, fragments of earthen tuyeres, similar to the pre-industrial tuyeres, have been excavated in many iron-yielding archaeological sites of India.

It is also important to note that pre-industrial natural steel has a high antiquity. For instance, the analysed specimens from Mahurjhari and Takalghat-Khapa (near Nagpur), dated seventh century BC, have been found to be of steel. The antiquity of crucible steel or *wootz* has not however been determined.

One of the most important pieces of evidence of continuity between ancient and pre-industrial iron-smelting in India was published by Andrew McWilliam of Sheffield in 1920. He saw pre-industrial iron-smelting in the village of Mirjati, two hours' walk from the modern steel city of Jamshedpur in Bihar, on 20 January 1918. Ploughshares, sickles, arrowheads, axes, knives and all domestic articles a village family required were made here. McWilliam analysed and compared his analysis of Mirjati iron with Robert Hadfield's analysis of the iron of the famous fourth-century AD Iron Pillar of Delhi. His conclusion is worth quoting at length :

> The analyses of the Mirjati iron and of the Delhi Pillar are very much alike. In the Mirjati iron the silicon varied in different lots of drillings from 0.09 to 0.22 per cent., no doubt depending largely on the amount of cinder that happened to be included. The sulphur in different samples varied from a mere trace to 0.036 and the phosphorus from 0.14 to 0.20. In agreement with the

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indications given by the microscope the carbon was variable, a second lot of drillings, for example, giving 0.2 per cent carbon.
The manganese in all the samples showed as nil or a mere trace. The ore contained 0.9 per cent. MnO and the cinder 1.9 per cent. MnO, so it is evident that manganese is not reduced under the conditions of the process, and as by other processes for the manufacture of wrought iron there is generally some manganese present the absence of manganese is nearly characteristic of iron made by this ancient process and hence gives confirmatory evidence in support of the view that iron for the Delhi Pillar was made by a process essentially the same.[30]

The aspects of continuity in Indian metallurgy through the ages have not drawn the scientific attention they deserve, but such observations make us keenly aware of the issue. □

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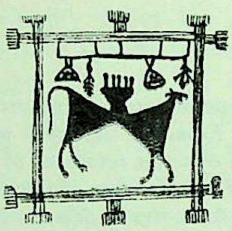

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Professor S. Chadrasekhar : Some Aesthetic Considerations

A. Ranganathan

In his *Shakespeare, Newton and Beethoven or Patterns of Creativity*, Professor Chandrasekhar says that "on reading Shelley's *A Defence of Poetry*, the question insistently occurs why there is no similar *A Defence of Science* written by a scientist of equal endowment". In trying to answer this question, one could think of at least four works—G. H. Hardy's *A Mathematician's Apology*, J. Bronowski's *The Common Sense of Science* and *The Visionary Eye*, Chandrasekhar's own 'Beauty and the Quest for Beauty in Science'. However, a distinction ought to be made between the great scientist-writers like Eddington, Jeans, Haldane, Raman, Chandrasekhar, Weinberg, Weisskopf, and the science writers. Furthermore, like Madame Curie, Albert Einstein and C. V. Raman, Chandrasekhar is a brilliant expositor. For instance Madame Curie's account of the discovery of radium, Einstein's formulation of the special theory of relativity in his paper on the 'Electrodynamics of Moving Bodies', Raman's paper 'On the Molecular Scattering of Light in Water and the Colour of the Sea' as well as his *Lectures on Physical Optics*, and Chandrasekhar's descriptions of the white-dwarf state of stars are memorable pieces of scientific writing.

"If our knowledge of the structure, the composition and the source of energy of the stars were complete", writes Chandrasekhar, "we should, in p. inciple, be able to follow the course of evolution of a star on the assumption that evolution proceeds along a sequence of equilibrium configurations. It is possible that such an investigation will reveal that secular evolution of the type contemplated is

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impossible at certain stages; if that is the case, it is highly important that we establish it, since discontinuities in stellar evolution are suggested by a variety of stellar phenomena, including those of the novae, the supernovae and the S.S. Cygni stars." What would be the fate of a star once the source of nuclear energy stops through the exhaustion of the available supply of hydrogen in the central regions ? Chandrasekhar shows that "the analogy of a star to a log of wood which burns itself out completely and leaves only ashes—or helium in the stellar context"—is not a good one, and concludes that possibly "the star has recourse to contracting in the manner imagined by Helmholtz and Kelvin, releasing gravitational energy". He says:

> The fact that completely degenerate matter in equilibrium under its own gravitation is best likened to a gigantic molecule in its ground state (R. H. Fowler) makes it attractive to suggest that white dwarfs represent the final states of stars. The fact that known white dwarfs do not contain any hydrogen lends support to the view. But the existence of the limiting mass makes it attractive only for stars whose masses are less than 1.4 times that of the sun.

What of the fate of stars with masses greater than Chandrasekhar's limit (the famous 1.4 criterion) ? Fred Hoyle gives a lucid account in his *Frontiers of Astronomy*. According to him, it follows that the fate of stars with masses greater than Chandrasekhar's limit is certainly most curious, whichever alternative they elect to follow. One possibility is that they shrink indefinitely, the other that a fantastic catastrophe occurs. Which ?

> Our conclusion . . . will be in favour of a catastrophe—or rather of two catastrophes: first a catastrophic collapse, then catastrophic explosion. The explosion turns out to solve the star's problem, for it removes so much material that the mass is brought below Chandrasekhar's limit. When this happens degeneracy can take control of the pressure balance, the star can cool off and evolution can proceed tranquilly to the white-dwarf state.

It is not only for his technical brilliance that Chandrasekhar is pre-eminent. He is even more celebrated for the aesthetic sensibility which informs such elegant expositions as 'The Scientist', *Shakespeare, Newton and Beethoven, Astronomy in Science and in Human Culture, Einstein and General Relativity—Historical Perspectives*, and 'Beauty and the Quest for Beauty in Science'.

It is interesting to recall an observation made by Professor Chandrasekhar in his paper on 'The Scientist', contributed to an international symposium in 1946 entitled *The Works of the Mind*. This paper is not only an essay in scientific exposition but also a

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self-revealing essay in the unfolding of his personal philosophy. A very distinguished physicist who apparently felt sorry for Chandrasekhar's preoccupation with things astronomical remarked that Chandrasekhar "should really have been a physicist". "To my mind", observes Chandrasekhar, "this attitude represents a misunderstanding of the real values of science. And the history of science contradicts it. Thus, from the time of Newton to the beginning of this century, the whole science of dynamics and its derivative celestial mechanics have consisted entirely in amplification, elaboration, and in working out the consequences of the laws of Newton. Halley, Laplace, Lagrange, Hamilton, Jacobi, Poincare—all of them were content to spend a large part of their scientific efforts in doing exactly this, that is, in the furtherance of a derived science. A derision of the derived aspects of science, implying as it would a denial of the values which these men have so earnestly sought, is to my mind sufficiently absurd to merit no further consideration." To cite an example, an important aspect of Chandrasekhar's work is derived from the theory of relativity.

The fate of a star which exhausts its source of nuclear energy has always interested astronomers. Chandrasekhar, who was a pioneer in applying the theory of relativity to the stellar models of white-dwarfs (degenerate stars), had theoretically predicted that no white-dwarfs can have a mass which is 1.4 times (ranging from 1.1 to 1.4) larger than that of the sun. This relativistically determined equation of state, derived from calculating the pressure of a degenerate electron gas in terms of stellar density, is known as Chandrasekhar's limit. Whether a star peacefully slides into the white-dwarf state of the stellar graveyard or whether a star explodes violently as a brilliant supernova shooting its way into space, its manner of death depends on Chandrasekhar's limit.

Further developments based on Chandrasekhar's limit, the Hertzsprung-Russel diagram which maps out different stages of stellar evolution and Stromgren's ultraviolet studies of interstellar gas, will help us in determining the biographical details of individual stars. Again, the new advances in nuclear physics have helped several astronomers to elaborate Chandrasekhar's theory of stellar evolution. Furthermore, Chandrasekhar himself has greatly contributed to this sophisticated theory which projects at least two generations of stars in its sweep. Similarly, yet another aspect of Chandrasekhar's work is derived from his pioneering calculations of post-Newtonian relativistic corrections in the structure of pulsars or rapidly rotating neutron stars. He also points out that "the basic concepts gain their validity in proportion to the extent of the domain

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of natural phenomena which can be analyzed in terms of them". "Looked at in this way", emphasizes Chandrasekhar, "science is a perpetual becoming, and it is sharing its progress in common effort that the values of science are achieved". And significantly, he winds up this paper with an answer to the question: "What is the case for the life of a scientist ?" The case is this, that he had added something to knowledge and helped others to add more and that these somethings have a value which differs in degree only, and not in kind, from the creations of the great scientists or of any of the other artists, great or small, who have left some kind of memorial behind them.

"My approach to objectives in science", remarks Professor Chandrasekhar in a recent interview, "is rather like a sculptor who likes to create a structure, which has the stamp of his personality. Once he has finished the structure, he does not go on chiselling it here and there for the rest of his life." Again, continuing this argument, Chandrasekhar observes that he has "been fortunate to find six or seven topics which have suited [his] temperament and . . . method of doing science over the last fifty years". And the topics which have suited his temperament—stellar structure, stellar dynamics, radiative transfer, hydrodynamic and hydromagnetic stability, ellipsoids and black holes—have won for him such distinctions as the Adams prize of Cambridge University, the Ramanujan Medal, The U. S. National Science Medal, the Gold Medal of the Royal Astronomical Society, the Rumford Medal, the Bruce Gold Medal of the Astronomical Society of the Pacific, the Royal Medal of the Royal Society, the Henry Draper Medal, the 1983 Nobel physics prize, and the 1984 Copley Medal of the Royal Society.

Chandrasekhar is a professional astronomer who in recent years has devoted some of his time to the explanation of some trends in the history of astronomy. In his 1968 Nehru Memorial Lecture he rightly states that "since no astronomy at an advanced level can exist without actual computations of planetary and lunar ephimerides, it must be the first task of the historian of Hindu astronomy to search for such texts". Here it is worth noting that David Pingree's projected eleven-volume *Census of the Exact Sciences in Sanskrit* might well fill in certain gaps in the history of Indian science. However, in order to get a clear picture, Chandrasekhar's Nehru Memorial Lecture—*Astronomy in Science and in Human Culture*—ought to be studied, along with his significant review of Neugebauer's *A History of Ancient Mathematical Astronomy*. For they not only

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reflect Chandrasekhar's characteristic aesthetic sensibility but also unveil the poetic vistas of the following Ptolemy verse:

> I know that I am mortal and the creature of a day,
> But when I contemplate the intricate circling spiral of the stars,
> No longer do my feet touch earth, but beside Zeus himself
> I take my fill of the immortal nectar of the Gods.

*

Professor Chandrasekhar's 1975 Nora and Edward Ryerson Lecture on *Shakespeare, Newton and Beethoven or Patterns of Creativity* is a significant contribution to the dialogue of the two cultures in our time. Here it is well to recall that Lord Snow, who concerned himself with the widening gap between science and the rest of our culture in his Rede Lecture, sparked off an interesting controversy. Actually, Lord Snow had not made a plea for universal dilettantism but attempted to put an end to the cold war between the sciences and the humanities. And Snow's casual observation that literary men did not know such concepts as the second law of thermodynamics, which to him constituted the scientific equivalent of 'Have you read a play by Shakespeare ?' was characterized as a "cheap journalistic infelicity" by F. R. Leavis in his polemical Richmond Lecture. Indeed the irony of the situation lies in the fact that both Snow and Leavis missed the significance of entropy in referring to the second law of thermodynamics. The entropy of a system is a measure of its degree of disorder. And human achievement itself is based on an aesthetic endeavour to release patterns or negative entropy, as the physicists term it. The release of patterns or negative entropy may range from F. R. Leavis' eristic writings to Chandrasekhar's application of Einsteinian reasoning to gravitation.

The man of letters and the scientist are equally concerned with what Aldous Huxley termed as the need to "give a purer sense to the words of the tribe" at different levels of perception. Here it would be relevant to refer to Professor Chandrasekhar's perceptive comment on the Heisenberg definition of beauty :

> In a deeply moving essay on ***The Meaning of Beauty in the Exact Sciences***, Heisenberg gives us a definition of beauty which I find most apposite. The definition, which Heisenberg says goes back to antiquity, is that 'beauty is the proper conformity of the parts to one another and to the whole'. On reflection it does appear that this definition touches the essence of what we may describe as 'beautiful', it applies equally to ***King Lear***, ***Missa Solemnis*** and the ***Principia***.

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And viewed in historical perspective it is clear that the dialogue of the two cultures is not a new phenomenon. For Wordsworth wrote that "if the time should ever come when what is now called science, thus familiarized to men, shall be ready to put on, as it were, a form of flesh and blood, the poet will lend his divine spirit to aid the transfiguration, and will welcome the Being thus produced as a dear and genuine inmate of the household of man". Furthermore, Shelley's stellar vision in *Hellas*—

> Worlds on worlds are rolling ever
> From Creation to decay
> Like the Bubbles on a river
> Sparkling, bursting, borne away.

—could be viewed as a poetic transcript of a monograph like Chandrasekhar's *An Introduction to the Study of Stellar Structure.*

This leads us on to the scope of scientific reference in modern literature, which oddly enough is less concerned with science than was literature in the previous eras. Seen in this context, a work of a man of letters like Aldous Huxley's *Literature and Science* is an important contribution to the dialogue of the two cultures. At the other end of the spectrum are the works of scientists such as Whitehead's *Science and the Modern World*, J. Bronowski's *Blake*, Desmond King Hele's *Shelley* and Chandrasekhar's *Shakespeare, Newton and Beethoven.*

Professor Chandrasekhar's 1978 Oppenheimer Memorial Lecture on *Einstein and General Relativity—Historical Perspectives* (based on his conversations with Eddington, Rutherford and others) is not only an essay in historical reconstruction, but also a piece of literature. Here is the key passage:

> Where. . . does Einstein's fame come from? . . . I will give an answer given by Rutherford, during a conversation 45 years ago, at which I was present.
>
> The conversation took place in the Senior Combination Room in Trinity College, after dinner, during the Christmas recess of 1933. During the Christmas recess, very few people normally dine in the College. On this particular occasion, there were only five of us: Lord Rutherford, Sir Arthur Eddington, Sir Maurice Amos (at one time, during the 1920s, the Chief Judicial Advisor to the Egyptian government), Dr. Patrick DuVal (a distinguished geometer), and myself. After dinner, we all sat around a fire and in the ensuing conversation Rutherford was in great form.
>
> At some point during the conversation, Sir Maurice Amos turned to Rutherford and said:
>
> "I do not see why Einstein is accorded a greater public acclaim than you. After all, you invented the nuclear model of the atom; and that model provides the basis for all physical science today and it is even more uni-

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versal in its applications than Newton's laws of gravitation. Whereas, granted that Einstein's theory is right—I cannot say otherwise in the presence of Eddington here—Einstein's predictions refer to such minute departures from the Newtonian theory that I do not see what all the fuss is about."

Rutherford, in response, turned to Eddington and said:

"You are responsible for Einstein's fame."

And more seriously, he continued:

"The war had just ended, and the complacency of the Victorian and Edwardian times had been shattered. The people felt that all their values and all their ideals had lost their bearings. Now, suddenly, they learned that an astronomical prediction by a German scientist had been confirmed by expeditions to Brazil and West Africa and, indeed, prepared for already during the war, by British astronomers. Astronomy had always appealed to public imagination ; and an astronomical discovery, transcending worldly strife, struck a responsive cord [*sic*]. The meeting of the Royal Society, at which the results of the British expeditions were reported, was headlined in all the British papers; and the typhoon of publicity crossed the Atlantic. From that point on, the American press played Einstein to the maximum."

I could see from Eddington's reaction that he agreed with Rutherford; and he, in turn, recalled some events of that time.

Among the most remarkable features of Einstein's general theory of relativity is its vitality. For the consequences of the general theory can be glimpsed in a number of disciplines ranging from literary criticism and aesthetics to the astrophysics of black holes. For example, Professor Whitehead states in his work *Science and the Modern World* that the pilgrim fathers of the modern scientific imagination are the great Greek tragedians, Aeschylus, Sophocles and Euripides. Again, he explains that the essence of dramatic tragedy is not unhappiness but that remorseless inevitableness that pervades scientific thought. Indeed, in this oft-quoted paragraph Whitehead highlights the dramatic significance in the very staging of that historic meeting of the Royal Society which enabled him to witness Eddington's verification of Einstein's general theory. Here is the Whitehead's celebrated paragraph:

The whole atmosphere of tense interest was exactly that of the Greek drama. We were the chorus commenting on the decree of destiny as disclosed in the development of a supreme incident. There was dramatic quality in the very staging:—The traditional ceremonial, and in the background the picture of Newton to remind us that the greatest of scientific generalizations was now, after more than two centuries, to receive its first modification. Nor was the personal interest wanting: a great adventure in thought had at length come safe to shore. Let me here remind you that the essence of dramatic tragedy is not unhappiness. It resides in the solemnity of the remorseless working of things. This inevitableness of destiny can only be illustrated in terms of human

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life by incidents which in fact involve unhappiness. For it is only by them that the futility of escape can be made evident in the drama. This remorseless inevitableness is what pervades scientific thought. The laws of physics are the decrees of fate.

At this point it is necessary to refer to two responses which have been recorded by Professor Chandrasekhar in his lecture on *Einstein and General Relativity*. When Ilse Rosenthal-Schneider asked Einstein as to what would have happened if his theory had not been confirmed by the Eddington expedition, Einstein's response was:

Then I should have been sorry for the dear Lord: but the theory is correct.

This estimate was corroborated by Eddington. For Eddington told Chandrasekhar that "left to himself, he would not have planned the expeditions since he was fully convinced of the truth of the General Theory of Relativity". Furthermore, despite his marked distaste for "over-confident judgements", Chandrasekhar reinforces the Eddington estimate and corroborates Einstein's own assessment of the general theory. And in his characteristic style—at once magnanimous and witty—Chandrasekhar states that "if some remote and presently unforeseen development requires a modification of Einstein's theory within its own well-defined framework of validity, then we should indeed have reason to 'be sorry for the dear Lord'."

The quest for beauty in science is derived from a sensibility at once scientific and aesthetic. In fact, the answer to this question has assumed several aesthetic categories of thought over the centuries—Pythagorean harmonics. Alberti's aesthetic of proportion, Leonardo da Vinci's plea for scientific exactitude in studying natural phenomena, D'Alembert's theory of harmony, Helmholtz's theory of harmony, Michelson's aesthetic delight, Hardy's mathematical patterns of beauty, Raman's aesthetic perception of the overtones of some Indian musical instruments, Dirac's feeling for the beauty of an equation and Chandrasekhar's application of Bacon-Heisenberg aesthetics to the general theory of relativity.

As mentioned earlier, the Heisenberg aesthetic criterion is derived from the thesis that "beauty is the proper confirmity of the parts to one another and to the whole". Commenting on the Heisenberg criterion, Professor Chandrasekhar says it is complementary to the criterion of Francis Bacon:

There is excellent beauty that hath not some strangeness in the proportion.

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Chandrasekhar argues that the general theory of relativity has some strangeness in the Bacon-Heinsenberg sense. For "it consists primarily, in relating, in juxtaposition, two fundamental concepts which had, till then, been considered as entirely independent: the concepts of space and time, on the one hand, and the concepts of matter and motion on the other". Thus, "in the fusion of gravity and metric that followed, Einstein accomplished in 1915, what Reimann had prophesied in 1854, namely the metric field must be causally connected with matter and its motion". And Chandrasekhar concludes that "the greatest strangeness in the proportion consists in our altered view of spacetime".

One could conclude this article with a sentence from Chandrasekhar's essay on 'Beauty and the Quest for Beauty in Science' :

> The translucence of the eternal splendour through material phenomena (of which Plotinus spoke) is made iridescent in such works as Jacobi's *Lectures on Dynamics*, Boltzmann's lectures on *Theory of Gases*, Sommerfeld's *Atomi Structure and Spectral Lines*, Dirac's *Principles of Quantum Mechanics* and the various gems of exposition which Schroedinger wrote in his later years.

A sentence which could well be applied to some of Professor Chandrasekhar's own works such as *Radiative Transfer* and *The Mathematical Theory of Black Holes.* □

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Book Reviews

Indian Philosophy : Past and Future : S. S. Rama Rao Pappu, R. Puligandla (ed.); Motilal Banarsidass, Delhi, 1982; 434 pages; Rs 125.

According to what the editors have to say prefatorially this book has a piquant genesis. They claim that reviewers of recent books on Indian philosophy have complained that contemporary philosophical thinking in India is indistinguishable from Western philosophical thought. Therefore the editors sought a clearer definition of the distinctive character of Indian philosophy and requested the contributors—there are some twenty—to clarify what is Indian about Indian philosophy and to indicate what in their opinion should be its goal.

Results of equal piquancy can be expected when it falls to the lot of a non-academic generalist—a rank outsider if you will—to review such an exercise. His innocence may provoke amused smiles on academic visages. On the other hand, it may lead to demystification of the kind achieved by the boy who shouted that the emperor was wearing no clothes.

Lewis Feuer, a university professor himself, laments that academic philosophy is withering in colleges and universities, recalls that Descartes, Leibniz and Spinoza were not academic philosophers, and affirms that the function of philosophy has been assumed by religious thinkers, historians, novelists. The need for an integrative, generalist approach is thus dawning on some academicians too. But the editors of the volume and the contributors, mostly, seem to be academicians of the conservative type, Their outlook favours proliferating specialization which in

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one sense becomes knowing more and more about less and less and leads to compartmentalization. This attitude also explains the basic assumption of the project that Indian philosophy must be distinct from philosophy elsewhere.

While academicians may be free to write great tomes defining what philosophy is or ought to be, we should be able to have a general idea in a far less excruciating way. Philosophy is an endeavour to frame a coherent, logical, necessary system of general ideas in terms of which every element of our experience can be interpreted. This experience is gained in the world and if it has its laws they can be justifiably defined as the necessary relations which derive from the nature of things. Since both quantity and quality seem to exist in the world, philosophy has to integrate physics and metaphysics. It is very difficult to see how any demand can be justifiably made that such a fundamental and universal endeavour should show regional, racial, cultural distinctions. The terms used may vary, the procedures may differ, but the ultimate goals have to tally.

Some of the contributors seek to distinguish Indian philosophy as subjectivity-rooted from Western philosophy which in their opinion is objectivity-rooted. But a genuine philosophy must be both, unless one posits that only one of the two—matter and mind—can be real. And philosophy seems to have been both, in India and the West alike. The philosophers of Ionia were probing the answer to the same query as the one posed by Upanishadic thought: "What is that by knowing which everything in the world is known?" The atom of Democritus was an ensouled particle. Psyche was immanent in *physies*, matter or nature. For Anaximenes, air was both a material element and the principle of life, being the breath of life. In Upanishadic thought, air or *praṇa* is progressively identified with life, with consciousness, and with the self itself.

To strain at stressing the distinction of Indian philosophy seems to be a misguided endeavour. But the reference to consciousness can lead us to the new tasks for Indian philosophy. One of the most important of these would really be the resumption of an old enquiry. The Upanishadic analysis of the three states of consciousness—in deep sleep, and the waking and dreaming states—was a brilliant beginning and very much ahead of its time. But after that, time seems to have stood still for Indian philosophy, for in book after book one finds this analysis cited as ultimate finding, in utter ignorance of the enormous amount of research done

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in recent decades, of the work of men like Sherrington, Adrian, Eccles and Penfield, and above all of the fact that this research supports the Upanishadic thrust towards the truth of a consciousness which is a superordinate reality controlling sensation, perception, thought, affect.

Reference to affect throws light on another area where Indian philosophical enquiry has been weak. Consciousness, in this tradition, has been aseptically pure and therefore anaemic; it has taken little notice of existential storm and stress. In the West too, people like Jaspers and Simone Weil have found the Cartesian *cogito* existentially very shallow, and Sartre changed the Cartesian argument to *Opto, ergo sum*: I choose, therefore I am.

A brilliant physicist turned profound philosopher, Weizsacker has stressed the need for philosophy to recognize that "the physical, the psychic, the transcendental and the existential 'I' are not four different things". Perhaps it is this integrative perspective that Indian philosophy should keep in mind in its future exploration. This symposium is still so wrapped up in the transcendent that it has forgotten immanence. Trying to counter people like Van Buitenen, Goodwin and Schweitzer but really succumbing to them, one of the contributors states that "one of the most fundamental ideas in Indian philosophy" is that "*Dharma* and *Moksha* operate on two different levels" and that "even though the former is of less value from the liberated point of view, it has none the less its own intrinsic worth in the empirical realm". The upshot, in spite of the hedging, is that the empirical and the transcendent are worlds apart. But the *Gita* affirms that moksha is realized here, on the earth (*ihaiva*), before death (*prāk-sharira-vimokshanāt*), and also that the liberated are those who have the deepest concern for the conservation of the health of the world (*lokasangraham*).

The contributors, and probably some readers, of this volume may feel that this reviewer is obtusely unappreciative of the hard work in the papers which, it must be conceded, are no worse than the general run of academic dissertations these days. But the reviewer in turn is bewildered by the fact that no rumour of the terribly imperilled world of today, with its nuclear arsenals with enough megakill capacity to destroy every living thing in the earth twelve times over, has penetrated this sheltered world of serene academic speculation. And here another great task for Indian philosophy suggests itself—probing the possibility of redeeming history. The

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Gita quintessentially defined the task of philosophy thus: integrating empirical knowledge (*vijnana*) and enlightened understanding or wisdom (*jnana*) to recover certitude (*astikya*). And it also defined the further task, the use to which this philosophical understanding should be put: to work as a free partner of deity in the redemption of history.

One could curve back to the reservation with which this reviewer began. Should philosophy be different in East and West, like costumes or food? I at any rate, find the precise echo of the *Gita*'s conclusion in the thought of Berdyaev:

> If history is more than a mere external phenomenon, if it possesses some absolute significance or tie with absolute life, if it is based upon a true ontological principle, then it must have both its beginning and fulfilment in the inmost depths of the Absolute.

In the *Gita*, the Supreme Person, into whom Vyasa transformed the rather withdrawn Upanishadic Absolute, affirms that he is deeply concerned with history and will incarnate himself in the crises of its moral anarchy. In Kurukshetra he outlined the divine design of creation to Arjuna and then asked him to decide for himself in absolute freedom whether or not he should align with this design. Here is the echo in Berdyaev:

> . . . in order to grasp the mystery of the 'historical', I must have a sense of it and history as something deeply *mine*, that is deeply *my history*, that is deeply *my destiny*. The presence of the historical destiny then becomes revealed in the very depths of the human spirit.

I would be wary of a philosophy which speaks with a strange voice that has no resonance and brings to mind no echo from far lands and many epochs.

KRISHNA CHAITANYA

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Latter-Day Psalms: Nissim Ezekiel; Oxford University Press, Delhi, 1982 ; 54 pages; Rs 20.

Heirloom: G.S. Sharat Chandra; Oxford University Press, Delhi, 1982; 64 pages; Rs 20.

Keeper of the Dead: *Keki N. Daruwalla*; Oxford University Press, Delhi, 1982; 63 pages; Rs 20.

My first impression of Nissim Ezekiel's *Latter-Day Psalms* is that it is a smaller collection than the earlier *Hymns in Darkness*. This is so not in terms of the total number of poems,

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but because *The Exact Name* (1965) and *The Unfinished Man* (1960) are represented here by eight and six poems respectively. The acknowledgements mention that these poems are included at the suggestion of the publisher. Though they may be welcome as the books they are from are now out of print, their inclusion does effectively reduce the number of new poems offered to the reader—thirty-seven. In my view, there is room for a 'Selected Poems of Nissim Ezekiel' which will take in verse from Ezekiel's earliest *A Time to Change* (1952) to the present available compilations.

Latter-Day Psalms has a stronger Jewish element than any of Ezekiel's earlier books. In addition to the title sequence—a commentary on the Old Testament psalms in the form of psalms—we have 'Jewish Wedding in Bombay' and such ethnic self-reflections as 'Minority Poem', 'Family', and 'Hangover'.

There can be no question about the authentic value of Ezekiel's projection of his unorthodox Jewishness in the 'Psalms' but I have doubts about 'Wedding'. I'm not sure the irony always works and even the pathos is somewhat superficial.

There is strength and sharpness in the following lines from the 'Psalms':

> Rare is the man whose fruit is
> in his season. Yet, his leaf
> must wither, and that which
> appears to prosper, is often
> dying at the root.

On the other hand, I find it very facetious to be told that Ezekiel was "horribly out of practice" on his wedding night because he had been "Back from London eighteen months earlier".

There are no less than four sequences apart from 'Psalms': 'Very Indian Poems in Indian English', 'Songs for Nandu Bhende', 'Postcard Poems' and 'Nudes'. The first three of these have representative selections only, and I presume more under each heading will appear in future collections. The 'Nudes' are the most substantial of this lot, even though some of the sonnets work less well than the others. There is something real and fresh in the perceptions of sexuality as in the following sestet from sonnet 9:

> I see you here, stretched out,
> not as complex pulls and tensions,
> muscle, bone, skin, resilience
> but as person, always
> human in your naked
> unposed poses, resisting form.

G. S. Sharat Chandra is described as an "expatriate" in the United States (Tallahassee, Florida), and also as "an important voice in Indian English verse". This claim

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may be questioned as, apart from the general standard of the verse, nothing significantly Indian emerges from it. There are references to grinding rice, beggars and huts, priests and temples, the *gulmohar* tree, and the autorickshaw, but they do not add up to attitudes or values in the way Ramanujan's Indian allusions do. In fact, in Ramanujan, these are not mere allusions or images, but evoke the ethos of Indian life.

Occasionally, a satirical or ironic note has greater value. In the poem entitled 'At the Burning Ghats' the description of the cremation ceremonies ends with this striking perception:

When the last cadaver is set ablaze
the priests yawn and get up
as if from poker
the night's winnings
tucked into their dhoties

The poems with an American context also tend to work on the surface, even if sometimes with precise images. 'In the Third Country' has a tired tone which is no doubt genuine. There is a reference to Allen Ginsberg, to the ex-wife joining the poet "by the next available flight", to the practice in Western societies of leaving the individual alone:

No one wants your whereabouts
no one worries yours mail

There are many similar statements which cannot be called bad as poetry but fail to arouse any very profound feelings in the reader. Sharat Chandra's positive qualities are, it must be acknowledged, notable even when one may not be enthusiastic about them. For instance, he never gushes or indulges in sentimentality, or loses control of the language as many Indian English poets frequently do. Though he often writes without punctuation, —and I can see no specific justification for that—he does organize his stanzas and the movement from one perception to another with discipline and sensitivity.

Daruwalla's collection has the substantial strength and persistent vitality which have earned him his present reputation. There is something impressive even in the page of contents—the three sections entitled 'The Keeper of the Dead', 'The Unrest of Desire', and 'In The Shadow of the Imambara'. The titles of the poems already suggest the kind of weightiness and range of ideas for which Daruwalla has been justly acclaimed—'The King Speaks to the Scribe', 'Pestilence in Nineteenth Century Calcutta', 'The Night of the Jackals', 'The Parsi Hell', 'On the Contrariness of Dreams'.

If we turn to one of them, such as the Calcutta poem, we see vivid pictures of the reality the poet wishes to evoke before us:

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In this land of mud and mire,
death was everywhere:
the water was heavy with it
like a woman with child,
and you could pick it up from the earth
as you pick up fallen fruit.
But it was the sahibs
who fell like skittles, the Reinharts
De Bussys, Claude Martins,
the Smiths and the Lawrences,
British and French and Dutch,
interred in the same loam,
mourned by the same tolling bells
their remains bristling with like crucifixes.

Daruwalla is able to recall historical India without being quaint and Kiplingesque. He has his own independent voice, his rhythms sound like those of a man with a deep bass voice (which he has in real life), and a frequently ironic, sometimes bitter and angry undertone. The poem, for example, from which I have quoted thus describes the bill for cremation expenses presented to the Englishman when his Sikh attendant dies: "five rupees for roasted sirdar". A tragic joke, of which there are not many in Indian English poetry.

Daruwalla's failures are in coping with passion and sensuality, which he rarely turns into art. He relies on being explicit, on a certain *macho* flourish or two, and an almost adolescent crudeness:

what is there in my hand that when it sidles into your blouse
it prowls like an animal that makes you writhe
turning your nipples into a black sprout of berries?

Keeper of the Dead is Daruwalla's fifth book. There is no doubt that he has created a world of his own around his ethnicity, his temperament, his professional involvements in the Indian scene, and his special feeling for ambiguities and contradictions.

VRINDA NABAR

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Culture and Development: T. N. Madan; Oxford University Press, Delhi, 1983; 61 pages; Rs 14.

The two essays comprising this work (both author and publisher hesitate to call it a book) are amended versions of the Dhirendra Nath Majumdar Lecture for 1980 delivered in Lucknow in 1982 under the auspices of the Ethnographic and Folk Culture Society. Professor Majumdar was an outstanding figure in Indian anthropology who built up the Lucknow University Anthropology Department and devoted

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himself to various facets of anthropological research and teaching. Committed to "the cause of anthropology as a federal discipline, he believed in the unity of the social sciences" (S. C. Dube: *Social Sciences in Changing Society*, Lucknow University, 1973, p. 12), a belief and commitment he instilled in his students, as is evident in Dr Madan's present work.

The first essay ('Development of Cultures') lucidly presents Professor Majumdar's views on the relationship of culture and development. Though chiefly concerned with the study of tribal cultures, as became an anthropologist of his time, Majumdar went much beyond the study of small-scale societies. He studied peasant villages and even carried out a survey of a city, which in those days—with urban anthropology in embryo—belonged to the province of sociology. Anthropology, he believed, was not for the ivory tower, a mere intellectual game, but an applied science of tremendous vigour. In his wide-ranging studies, Professor Majumdar concerned himself always with the problems of underdevelopment and thought over the contribution the social sciences might make towards solving them. He conceived of culture as a dynamic entity at a time when the glorification of the static, conservative forces of culture was evident in the work of some others.

Anthropology is a discipline of notorious past, dismal present and uncertain future. It was nursed in a colonial setting—an aid to alien administrators whose interests lay in exercising peaceful control and siphoning off of local wealth. These ends demanded intimate knowledge of the natives, and who could answer the demand better than anthropologists who had launched their discipline as a holistic study of 'other cultures'?

Such being colonialist needs, significant changes occurred in the last and present century in the anthropologist's cognition of social reality. Study of social evolution and sequence gave way to study of society as it 'actually' exists. (This shift of focus—diachronism to synchronism—conformed to the basic scientific axiom that description of reality should be based on verifiable—and falsifiable—observations.) Conjectural evolutionism lost ground that the new functional methodology gained, devised for a here-and-now depiction of society—society as it is rather than as it was or ought to be. Tribal oppression and change were subjects that took the back seat.

The fruits of functional studies soon became anachronistic as the societies the method

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was applied to were being quickly transformed by the impetuous forces of an alien culture. Descriptions of societies as they 'exist' were like fairy-tales—never recording colonial exploitation or changes proposed to improve the lot of the exploited.

Professor Majumdar—no colonial anthropologist (though a Cambridge man)—was deeply concerned about the decline of Indian tribes. Not only had alien rule wrought ruin on tribal socio-cultural systems, the tribes were declining demographically because of dreaded contagious diseases introduced from outside. Individuals were psychologically disoriented. Majumdar—"essentially a field worker interested in attending to concrete problems like a 'clinician'" (p. 15)—diagnosed the malady as arising from the contact situation: "the impact of 'advanced' upon 'simple and passive' societies" (p. 10). The cure lay neither in isolating the tribes in reserve areas, nor in treating them like backward Hindus, but in gradually integrating them with the mainstream of Indian civilization and nationhood. He proposed a "creative or generative adaptation" (p. 12). Tribal cultural identity was to be zealously protected, but not at the cost of change, which was inevitable, and desirable if introduced in line with tradition, without disruptive consequences.

Dr Madan shows that though Majumdar was influenced by the functional paradigm, especially Bronislaw Malinowski's variant of it (pp. 10-11), it was not conservative functionalism he professed. He firmly believed anthropology could provide precise knowledge of a society to aid its betterment through ameliorative development programmes. This knowledge was to generate the "culture of development", show the direction of change and speed it up, point out the pitfalls. To quote Dr Madan:

> Modernization of social development and economic growth were seen by Majumdar as generally desirable and interrelated goals—as an unquestioned 'good'—with the clear implication that the country needed to develop in its villages and cities, in its homes and offices, ***a culture of development***, i.e., a culture which would initiate, promote and sustain development [p.22].

The first essay thus epitomizes Majumdar's anthropology and places him vis-a-vis two other towering Lucknow intellectuals, Radhakamal Mukerjee and D. P. Mukerji. Majumdar's ideas are surely useful, but in the context of changing social realities, we may examine some of them here with a critical eye.

Like Toynbee and others, Majumdar saw development as culminating in the convergence of cultures (p. 21). The convergence

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theory, once widely held as the culture of the West, the product of Western industrialization, was regarded as the model all other cultures would emulate in the absence of any other model of growth, has come in for criticism with the realization that material convergence of cultures is not, nor should be, the convergence of ethos. Besides, development—we have seen—never takes the same path everywhere; the historical experience of a society conditions the direction of change. Models of endogenous growth have since emerged, besides the Western model, offering options to the developing world.

Majumdar stood emphatically and optimistically for the culture of development. If traditional cultures were unable to offer change, he did not hesitate to say it should be "introduced into them from without" (p. 22). This is, however, easier said than done. Our record of rural development shows that isolated innovations (like medicine, fertilizers, tap water, etc.) have often been totally rejected by the rural folk. Changes in one sphere of society, after all, affect the other spheres too, and unless the sum of changes resulting from the introduction of an innovation is envisaged and the recipient society prepared, our efforts are not likely to bear fruit.

It may not be irrelevant to observe at this point that despite every effort since independence, tribal poverty is not alleviated; the social stigma attached to tribes remains; and that exogenous exploitation over the years has resulted in not a few tribal separatist movements. We have failed to nurture an even culture of development, as witness not the condition of the tribes alone, but the contrasts our chief cities offer. This faliure is also the failure of an anthropology that has not shed its colonial garb. A national anthropology has not emerged, nor modes of cognition of social reality changed overmuch. Majumdar's optimism and faith in his discipline are difficult to share at this dismal hour: perhaps in the light of the "anxieties of D. P. Mukerji or the dismay of Radhakamal Mukerjee" (p. 22) we might reorder our anthropological priorities.

The second lecture is in essence a redefinition of development. Issues raised in the first are carried forward here, but the essay "may be read independently" (p. 5) for its insights into the 'Cultures of Development' (its title).

In the sociology of development, East and West were generally offered as two contrasting cultural types—the West dynamic, the East static, its staticity rooted in religion and tradition. The Western man was

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innovative, enterprising, secular, rational, the Eastern quite contrariwise. Thus, culture-generated personal attributes made for Eastern inertia, which explained in turn the backwardness of the East despite abundant resources. (Colonial exploitation also, to be fair, was cited in explanation.) If change was extrinsic to the East, it must be extrinsically introduced for the sake of development—such was the prescription. Native and foreign social commentators subscribed to these notions, using the factors of Eastern backwardness in deft combinations. In the case of India, if it was found she had the counterparts of "inner-wordly asceticism" (Max Weber)and the need for achievement, colonial rule explained her backwardness. In the instance of China, which had not experienced the depredations of colonial powers as long as we did, the Confucian-Tao syndrome sufficed.

This mode of explaining underdevelopment was intellectually legitimized at the level of social-science theory by Marx and Weber—the giants of contemporary social science—whose examinations of Asian stagnation and backwardness ascribed a negative role to tradition. If traditional societies were "incapable of generating modernity from within" (p. 57), their salvation lay in a slow (or fast) annihilation of tradition. The Western model of modernization was the one to follow, and from its emulation would follow an inevitable and desirable convergence of cultures.

This argument did not survive the emergence of Japan as the first non-Western industrial power. Various studies on Japan's modernization showed an easy commerce of the old and new—traditional institutions regarded as inimical to change were seen to act as agents of change, vehicles of a new outlook, without degenerating themselves. The Japanese phenomenon created a sensation in academic circles and in the sociology of development the idea of indigenous development—every nation fashioning its own model of growth—gained ground. The idea of cultural convergence was abandoned, that of cultural pluralism—the simultaneous existence of many cultures, the world a cultural mosaic—espoused. Dr Madan rightly observes:

> The affirmation of the positive value of cultural pluralism is, it seems to me, the cornerstone of the new thinking on alternative visions or models of development." [p. 31]

He further asserts:

> Modernization of culture should not mean sameness; for sameness is dullness of the mind and deadens creative faculties. [p. 43]

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Cultural pluralism is consistent with the sociological axiom that the aggregation of ideas characterizing a culture cannot be abolished, no matter how hard we try, because ideas change at a slower pace than technologies or the instruments of production (pp. 28, 47); by aid of these ideas people find their bearings, know the meaning of existence, happiness, survival and death. Ideas comprising the core of a culture may survive a sea change in technology. Again, traditional institutions may adapt to changing social situations; caste and joint family in India are examples. Hence modernization cannot take the same path everywhere—the inhering ideas differ in different settings, and must be harnessed to form the driving force of development.

The first task is to discern the reasons for the Third World's underdevelopment, which cannot be cultural alone. Cultures, we have seen, can act as agents of development. Colonialism is surely one reason; persisting neo-colonialism and imperialism, bonds in which most Third World countries are concatenated, may yield clues to the others. Dr Madan observes:

> **Underdevelopment in the so-called Third World has in fact been the result of the capitalist development of the First World.** [p.30]

Economic and political subjugation of the Third World apart, the First World has also established new indices of happiness and survival, with serious ethical implications—the new values of the privileged of the developing world. In consequence, the production of consumer goods in excess of wholesome needs has become an index of economic growth, a product of the culture of consumerism—reducing happiness to the acquisition of commodities (p. 35), replacing traditional values, the joys of communal living. This "imitative choice-making" (p. 50) by the upper classes of the developing world has widened the class hiatus—the overconsumption of a minority coexists with the underconsumption of the majority (p. 42). Widespread pollution and other environmental damage, emergence of new strains of microörganisms and associated diseases, depletion of non-renewable natural resources have followed, everywhere, upon misguided development that does not answer human needs. It is not argued that we put the clock back, but put a "limitation on wants and innovations" (p. 59) and "strive for an alteration in consciousness" (p. 47). Development, after all, is not economic growth alone.

How to go about defining human needs objectively and

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achieving new values? Dr Madan does not take up the question separately, but socialization and education, the efforts of mass media and committed voluntary agencies can go a long way to introduce new life-styles, endogenously fashioned. Dr Madan proposes "endogenous development" (p. 50) for the well-being of all, the material aspect of well-being resting on "objectively defined basic needs", not factitious wants created by the culture of consumerism. Endogenous development would make for, world-wide, the beauty of diversity—"the multidimensality of social and cultural life and of the plurality of life-styles" (p. 50).

Will endogenous development change the existing relation between the developed and developing worlds? Not by itself, but "a new partnership based on the recognition of the unique cultural character of each people as well as the shared ideals and socio-economic aspirations of all peoples" (p. 45) can end the present relations of dependency. There is much optimism in this passionate appeal to values. Will the First World give ear to such appeals and bring about an alteration in its consciousness? A debatable issue, but an alteration in consciousness is imperative in both the developed world and the privileged of the developing world if mankind is to survive in all its beauty and variety.

Not many might share Dr Madan's optimism, but all would be stirred by his appeal; there is a lot of soul in it.

VINAY SRIVASTAVA

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Brief Notices

Encyclopaedia of Indian Temple Architecture—South India (Lower Dravida Desa): Michael W. Meister (ed.); Oxford University Press. Delhi; Rs 750 (set of two volumes).

The first volume carries the text, maps and diagrammatic line-drawings and the second all the relevant photographic illustrations. The period covered is from the earliest from which examples survive to AD 1325. This monumental series seeks to consolidate a generation of research and codify an appropriate technical terminology for Indian temple architecture. Further volumes in the series will cover the temple architecture of northern India.

Classical Hindu Mythology—A Reader in the Sanskrit Puranas: Cornelia Dimmitt, J. A. B Van Buitenen (ed. & tr.): Rupa & Company, Delhi: Temple University Press; Rs 30.

Organized in six chapters, the myths are of creation, time and space, seers and sages, gods and goddesses. The messages of Puranic lore, the cherished values of the Hindu religion, receive their share of attention.

Caste System: Myths, Reality, Challenge: Sachchidanand Sinha; Intellectual Publishing House, Delhi; Rs 100.

This thorough study of caste as it developed in India through the ages shows the system to have been anything but rigid in operation and exposes the fiction of purity of blood and pedigree. Different theories—of Aryan origin, occupational, Marxian, hierarchical—are expounded and discussed. The author's prescription

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for the ills of caste is a resurgence of the basic values of equality, fair play and social justice.

At the Bottom of Indian Society: Stephen Fuchs; Munshiram Manoharlal, Delhi; Rs 105.

This is meant to be a companion volume to the author's earlier work (1975) on the aboriginal tribes of India, and deals exclusively with the problem of untouchability—its origins, development and present position. A valuable reference document for social workers, students and administrators.

Streamlining Our Religion: R. B. Lal; Bharatiya Vidya Bhavan, Bombay; Rs 30.

The author derives his lessons from the *Gita* and the *Veda*s and argues that affluence and enterprise need not lead to surrender of ethics. He calls for an 'updating' of Hinduism in order that it may serve as an effective instrument for the betterment of society.

Life and Art of Early Andhradesa: Amita Ray; Agam Kala Prakashan, Calcutta; price not stated.

Andhra Pradesh has a distinguished artistic history and a culture all its own. From the beginning of the first century AD, there has been a relatively advanced polity and a prosperous society thriving on foreign trade and commerce. The author discusses the distinctive features of the art of Amaravati and Nagarjunakonda, the settlement patterns, buildings and monuments of early Andhradesa. Fully illustrated.

Essays in the Social History of India: Ravindra Kumar; Oxford University Press, Delhi; Rs 130.

The author analyses the current problems of the country against the backdrop of a century and half of colonial rule. The essays examine how socio-economic trends in pre-independence India have survived in new forms in independent India.

Panorama of Indian Diplomacy: N. M. Khilnani; S. Chand & Company, Delhi; Rs 100.

The art of diplomacy has been recognized in India as such since Kautilya wrote his *Arthashastra* in ancient times, describing the best diplomat as the one who pays the smallest price. India's role in framing and defining the concept of non-alignment is explained.

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Science and Integrated Rural Development: M. S. Swaminathan; Concept Publishing Company, Delhi; Rs 100.

The book deals largely with India's agricultural problems, and the author, a noted agricultural scientist, calls for a national policy of integrated rural-urban development. The technology outlined is intended for the benefit of the small Indian farmer.

People's Participation in Development—Approaches to Non-formal Education: Walter Fernandes (ed.); Indian Social Institute, Delhi; Rs 20.

The inadequacies of the development strategies tried out so far are brought out in this book and the very concept of development challenged. The contributors, well known for their professional dedication, agree that development programmes should shed their elitist bias and bureaucratic mode.

Workers' Participation in Management in India and Abroad: Masood A. Mirza; Printwell Publications, Aligarh; Rs 65.

The study traces the history of workers' participation in management as it has grown in Britain, West Germany and Yugoslavia, and stresses the need for such participation in India for ensuring industrial progress and harmony.

To Inform or to Control ? The New Communications Networks : Oswald H. Ganley, Gladys D. Ganley; Hindustan Publishing Corporation, Delhi; Rs 30.

Do the new communication networks set up in the West inform the developing world or control it? Have the intelligence services of the superpowers any contribution to make to the comity of nations? Straight answers to such questions are to be found in the book. □

—D. Raghavan

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The Imperative of Peace

Rajiv Gandhi

Excellencies,* Ladies and Gentlemen,

It is a high privilege for me and the Government and people of India to welcome the Presidents of Argentina, Mexico and Tanzania and the Prime Ministers of Greece and Sweden to New Delhi. What brings us together is mankind's highest cause today or ever—namely, Peace. We represent not only our own peoples but the constituency of peace which embraces all continents and countries and includes vast millions even within nuclear weapons countries. We reflect humanity's passionate conviction that the Earth shall live. That is our mandate. That is the cause for which Indira Gandhi lived and worked.

In 1944 a great experiment was launched, the United Nations, in the tremulous hope that the thought of war can be abolished from the minds of men. Another experiment was going on at that time—for harnessing the secrets of the atom to military power. The first nuclear bombs were dropped in 1945. The U.N. Charter could not obviously refer to nuclear weapons, but the General Assembly has unequivocally declared that the use of such weapons is a crime against humanity. The five permanent members of U.N., who have a monopoly of nuclear weapons, claim a kind of legitimacy for possession of such weapons. But to the peoples of the world, nuclear weapons are in themselves an unmitigated evil and their use or threat or use by anyone is impermissible in any circumstances.

* Statement delivered to the Six-Nation Summit on Nuclear Disarmament.

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It is true that no nuclear weapons have been actually used since 1945. The proponents of the theory of balance of terror take credit for this nuclear peace. It is at best a grey peace, precarious and unstable. Production of nuclear weapons is going on. They are becoming increasingly sophisticated. Each improvement in accuracy and mobility makes present agreements so much more fragile.

Existing compacts deny to non-nuclear-weapons states the right to conduct experiments even for peaceful purposes, while placing no restraint on the nuclear-weapons powers in the matter of multiplying their arsenals. This is a discrimination to which we have objected. Much is made of the danger of horizontal proliferation. But the dangers of present stockpiles, their vertical proliferation and the risk of catastrophe by error or design are slurred over. How can one nation or five nations be considered more responsible than the rest ? Basic problems of sovereignty and human survival are involved.

The two great powers have recently agreed to resume discussions on nuclear weapons. This is a good development and we welcome it. We want these negotiations not to be confined to ways of dealing with only the consequences of improvements in capacity and delivery systems. They must ultimately address themselves to the basic objective, which is the elimination of all nuclear weapons, as recognized in their statement. Credible and reassuring first steps would be a freeze on further production and deployment of nuclear weapons as well as fissile material for weapons purposes. This has to be followed by nuclear-weapons powers embarking on physical reduction of stockpiles. Furthermore, the discussions and agreements should be more than bilateral; they must apply to all possessors of nuclear weapons. Otherwise the peril remains open.

The actual prospect of nuclear weapons being used remains where national security is based on the premise of "stability" through extended deterrence or through the building up of counter-force capabilities or a multi-layered network of defence systems. Every refinement of deterrence, like "flexible response" and "limited" and "winnable" war scenarios, assumes that the use of these weapons can be controlled by increasing their technological sophistication. The qualitative arms race is thus built into the arms control approach. That kind of arms control is in reality no control.

The dangers have increased of computer errors, systems failures, accidents, and misjudgements at lower echelons to whom responsibility is inevitably delegated. There is, besides, the new

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danger of nuclear terrorism and blackmail.

Sophisticated weapons are being transferred not merely between members of military alliances but also outside. Global justifications are advanced. This leads to several new local and regional tensions which, sooner or later, are bound to result in physical conflict. This is not mere speculation. It has immediate relevance to the situation in our region.

Arms race and international tension are inseparable companions. Over the years there has been a heightening of tension all over the world. All multilateral activity is getting increasingly snarled in bloc rigidities and polemics. There is a spurt in proxy wars and many regions are affected by turmoil directly and indirectly. Therefore, the initiation of a dialogue between the major powers, though welcome, does not by itself free smaller and vulnerable states from the competitive attention of the big powers. Along with the dialogue, there must also be a genuine effort not to view all relationships in terms of the global strategic balance and "spheres of influence".

Military spending is rapidly nearing the staggering figure of $ 1000 billion annually. It continues to rise while the world economy hovers between uncertain recovery and a relapse into deeper recession. This vast military expenditure, apart from causing dissonances in the economies of the leading military powers, has aggravated the problems of global economic recovery and development. Many developing countries face the stark prospect of economic collapse and social upheaval.

Technological advances are inexorably widening economic disparities among nations. The policies of powerful governments are further accentuating these disparities, building up tensions which bode ill for relations amongst countries. Force cannot find answers to these problems. Vision and statesmanship demand a cooperative approach and constructive measures to reduce and remove disparities and ensure a better life for all.

A new and unfortunate development is the undermining of the various multilateral agencies in the U.N. system. These agencies have played a notable part in assisting poorer countries in the last four decades. If they are weakened, the ideals of the United Nations, indeed the very basis of international cooperation, would be shaken. A campaign has to be launched in the capitals of the world to reverse this unfortunate trend.

The threat of first strike is now being used to justify new kinds of arms races. The probability of climatic catastrophe renders the first strike meaningless. The Nuclear Winter hypothesis, which is

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being increasingly accepted, shows that even a first strike would spell a holocaust as much for the aggressor as for the victims. It underlines the indivisibility of peace and the urgency of disarmament.

Another matter of concern is the idea of deep strike, according to which conventional weapons could be used for striking at targets at distances up to 300 K.M. It is claimed that this would lessen the resort to nuclear weapons at an early stage of war in Europe. The delivery systems for the conventional deep strike weapons are indistinguishable from those of nuclear weapons. By blurring the distinction between nuclear and conventional weapons, the possibility of a nuclear war is increased and the control of nuclear arms made more difficult.

In May last, our six nations called upon nuclear-weapons powers to halt the arms race and put into effect a programme for the cessation of the testing, production and deployment of nuclear weapons and their delivery systems. It was endorsed by many parliaments and national groups and evoked positive response from one nuclear-weapons power. Today we also ask the powerful to prevent an arms race in Outer Space and to embark on a comprehensive treaty to ban the testing of all nuclear weapons.

The survival of the human race depends on the demilitarization of the global surface and on keeping Outer Space free of weapons. We must strengthen the defences of peace in man's inner space as well—his mind, soul and spirit. Mahatma Gandhi, who was alive when Hiroshima took place, declared so perceptively : "The bomb will not be destroyed by counter-bombs, even as violence cannot be by counter-violence". Let us work to strengthen humanity's faith in itself and its capacity to conquer the peril which has come out of its own technology. □

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The Story of Leather

Kamaladevi Chattopadhyay

Leather has always held a special place in man's life. Leather is an unusual raw material : skin of the animal converted into a fabric for human use. Its natural beauty makes it a very popular material for handling. It was used extensively in many primitive societies and was considered an adjunct to survival itself. To the primitives, skin and hides were indispensable materials for clothing such as parkas, boots, robes and moccasins ; shelter items like tents and tepees; transportation canoes and kayaks; self-defense armour : shields and weapon-sheaths.

Stone Age man discovered that the quality of leather could be improved by curing the skins and hides, which he did by rubbing them with fat and smoking them over a wood fire. Later he made the earliest form of tannic solution in pits filled with decaying leaves and bark.

Artefacts found in Egyptian tombs indicate that hides were made into decorative leather goods as far back as 1300 B.C. It is however believed that the Chinese worked with leather even earlier and are credited with having cured skins with salts of alum mixed with mud. In fact the Orientals exceeded the skill and imagination of other civilizations in their use of leather as a medium of creative expression like screens, chests, boxes and other objects, finely patterned, elaborately decorated and appliqued.

The Mediterranean civilizations of ancient Greece, Rome and Israel contributed to development of leather craft. As book making was a well-developed art among these peoples, their use of leather parchments became highly refined.

The Hebrews are credited with the discovery of oak and chestnut bark tanning method, by soaking the skins in fermented bark

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containing tannic acid. This was used on skins that are to be tooled or carved. It is the only method that permits decorations to be transferred and produced on leather.

It was the Moroccans who attained an outstanding degree of excellence in leather work and transformed it into an art, and techniques developed during this early period were handed down from generation to generation and are still practiced today. Moroccan leather work was, and is, characterized by its original and intricate designs, carved, embossed and painted on goods of all description.

Influenced by the Moroccans, the Spaniards fashioned magnificent, variously shaped objects that were embroidered, appliqued, carved, inlaid, onlaid and stamped in gold and silver. The Spanish panelled and covered walls with beautifully designed and coloured hides. Boxes, chairs, cases, bottles and books covered in leather all part of the elegant and ornate Spanish environment.

During the Middle Ages, leather craft guilds were established in many fields. These powerful associations not only protected their members but also imposed strict rules to ensure high quality workmanship. The Fraternity of Leather workers, organized in 1397, was one of the earliest guilds.

While the Europeans were developing leather craft in highly ornate and decorative directions, the American Indians, who were equally inventive in the practical use of leather, made utility items like moccasins and weatherproof buffalo-hide tents, and used leather laces for their tools and tomahawks. These Indians also made buckskin—a soft, flexible, water-resistant leather, by soaking the skins, and drying them over fires for several days.

The American colonists were equally utilitarian in their uses of leather. From leather they made clothing, buckets, tableware, screens, door coverings, hinges and even coach springs. Later they often adorned their saddles and clothing with elaborate leather fringes and carvings in the manner of the Indians.

Although leather is not as necessary a commodity today as it was in earlier cultures, it is still widely current. Genuine leather is preferred to substitutes. However, widespread concern about conserving natural resources has focussed attention on the need to be judicious in the use of not only leather but all other natural products.

The tanning of leather is necessary to prevent decomposition of skins and to make them tougher and more pliable. Although tanning methods have often varied, the vegetable-tanning method used today is basically the same as that used by the Hebrews thousands of years ago. Towards the end of the eighteenth century, it was

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discovered that the principal tanning agent in oak bark, was present in other plants like chestnut and hemlock bark, which were excellent sources of tanning and were widely used by American leather-craftsmen, because hemlock in particular was in plentiful supply.

The modern method of chrome tanning developed at the end of the nineteenth century by Augustus Schultz, an American chemist, produced a new and different kind of leather which revolutionized the tanning industry. Although the leather resulting from chrome tanning was stiff and hard and had to be treated with soaps and oils, it became popular because the process was faster and less expensive.

Thereafter machines were invented which cut down the number of workmen. Soon machines took over the preparatory processes and, gradually, improved technology built leather into one of the major industries.

Skins and hides are obtained from a variety of domestic and wild animals. The term "skin" is applied to the pelts from small animals, while the pelts of larger animals are referred to as hides.

Many types of leather are available to the craftsman in different weights and colours.

Calfskin is an excellent tooling and carving-leather for handbags, bill-folds and other similar small projects ; because of its softness a stiffner is required when the skin is used in large projects. It is smooth, long-wearing and close-grained and comes in many colours. It is also embossed to resemble alligator or lizard skins.

Cowhide, a natural-coloured leather, is heavier than calfskin and its surface is not quite as smooth, is ideal for tooling and stamping and may be used for all projects. A very durable leather, cowhide is used principally for briefcases, bags, shoe soles, etc.

Steerhide is a pliable, crinkly-grained leather that is either two-toned or natural, tools very well and may be used for all projects.

Sheepskin is neither as strong nor as durable as calf. It is most suitable as a lining material.

Goatskin is used largely for linings, book bindings, and billfolds.

Pigskin is a very durable leather with a distinctive surface grain that is suitable for tooling and is often used for handbags, cases and billfolds.

Genuine alligator comes in several shades of brown and mahogany, and is used in billfolds, expensive shoes, and handbags.

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Lizard comes in several colours and is used in small projects.

Ostrich is identified by the characteristic quill holes in the skin. The grain is often embossed on cheaper skins because genuine ostrich is very expensive.

Hair calf, or slink, is the skin of a prematurely born calf, used for small projects and clothing.

Embossed cowhide, or steerhide is used for briefcases, note-books, and other large projects. It comes in various colours, but black and brown are preferred.

Skiver is a very thin, grain-split sheepskin used as a lining or covering for boxes, comes in various colours.

Suede is a kind of finish produced by raising the nap on the inside, or flesh side of leather, generally from sheep or calf ; it comes in a wide range of colours.

In South America, Peruvian craftsmen have a technique of raising the surface of leather by placing over dampened leather mounds of paper and cotton and repeating it, until the leather has large raised sections as also deep lowered sections ; this gives it a sculpted effect.

In Florence, Italy, leather workers create a gold surface with a tiny camel brush after damping the leather with water and lavender or poppy oil or even a thin film of egg of white. Finally the gold leaf is pressed down on the surface.

In Morocco narrow strips of leather, often in a variety of colours, are used for lacing to produce an embroidered effect.

India's leather industry is dominated by small units in all stages of leather processing : millions of artisans and workers in these labour-intensive small industries account for 80% of production and 90% of the employment in flaying, tanning and finishing of leather. The industry shows a high degree of regional concentration and specialization—over 90% of all tanning and finishing being carried out in rural and para-urban areas mainly in West Bengal and Tamil Nadu ; the production of finished leather goods is concentrated in Agra and Calcutta.

It may not be generally known that India boasts the largest livestock herd in the world, with 12.5% of the world livestock population and an annual availability of 107.5 million hides and skins. Since this raw material base has been virtually inelastic, increased earnings and employment must come from increasing the value added locally for leather products, especially those for export. Traditionally, semi-finished skins comprised the bulk of Indian leather exports. However, in the face of strong world demand for finished manufactures the government enacted policies for an

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increase in finished products of higher value, with a target of quadrupling the value of exports in the eighties.

A foreign leather expert in the late seventies while watching leather workers at their job in a state factory in Agra, asked one of the supervisors if the craftsmen could make something new, to which the reply was they would not be able to, as they were "uneducated". The foreign expert was not easily daunted for he had seen the rich variety and splendour of Indian handicrafts. So he sought permission to ask the leather workers to produce something which he was sure they could. He pointed to a pair of sandals from Kashmir that he wore, made of matted leather strips, and asked if they could shred leather into thin wiry threads and weave them into a very fine fabric. Quick and firmly they nodded their heads in assent, their faces alight with interest. The expert pulled out of his pocket a piece of suede from the Madras tannery, and handed it to them. The velvety fabric the craftsmen wove out of its shreds made, as the expert confessed : "My hairs stand up, my nerves tingle, I could hardly believe my eyes." He asked them if they were supplied even finer threads, would they weave even finer leather fabric? They were ready. It only needed a machine to draw out finer threads and perfectly superb cloth was turned out. It was lustrous and meltingly soft. So the ordinary mochi who made footwear could also turn out this glamorous new material. The expert called for some new colours. Again the supervisor in a most supercilious way brushed it away with : "They cannot make new colours." The workmen however belied this, producing the most heavenly colours in 52 different shades !

As sometimes happens at that level, this passed unacknowledged, unnoticed. No publicity was given to it, the Indian people remained totally unaware of what, to an expert eye, was an undreamed of marvel that had been wrought. This oblivion continued for a long time, until the tide turned as tides will. A project to develop this material and to manufacture various garments from it was finally launched. Then something surprising happened. The foreign expert on leather garments insisted on engaging Indian talent to design the fashion garments. For he did not want the usual run of western lines and curves. To him the entire garment had to be hundred per cent Indian. The only foreign touch would be in the leather cutting technique, which he found the Indian leather workers began to master pretty soon.

The four Indian designers were all women, amateurs, but they contrived a perfectly marvellous performance. These Indian designs broke new ground. They had more than a "new look", they had a

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definite Indian flavour, an Oriental aura about them which when presented on the Western horizon, made a truly startling effect, whose full story needs to be told in some detail.

When these garments were ready those who had been interested and had taken a purposeful hand in the unfolding of the project, managed to have a public showing in the auditorium of the India International Centre for Delhi's discerning audience and to make the Indian public aware of this new renaissance in the Indian leather world. The Delhi viewers certainly testified to being most impressed, though one was not sure whether they grasped the full significance of all that had gone into this end-product or whether it was just a novel fashion show they enjoyed seeing. The Indian classical music lent an aura of classicism to it. The general comment was : "We have never seen anything like this before !"

The press however took the usual commercial view of it, stressing this as a new gateway to larger exports. "Indian leather garments catch the Western eye" was a typical disheartening caption. Even these few comments were tucked away in some corner of a few paper and to spot which a concerted effort had to be made. That an exciting innovation had taken place was lost on these important media men.

The foreign expert took just a few of these new fabrics out and showed them to the international leather kings in Rome like Gucci, Pucci and the like. When the expert returned, we eagerly asked for the result. "Wide-eyed, they absolutely flipped", was the excited answer. They had asked him to have a show in Rome; their appraisal was that the fashion conscious would go crazy.

To get the Rome show was an even more difficult task. It eventually did come off. For comments on the show itself, here are a few extracts from some of the leading international papers. Here one is startled by the keen perception and the sharp sensitivity of the assessors—What a far far cry from the pale Indian media reaction "A new star is born in the East, on the Indian sky" was how the new fabric was heralded. This event was compared to the ancient opening of the Silk Route when fabulous silks came pouring into the West from the Orient. Today it was leather transformed into a dream substance, softest, lushiest, velvety as cashmere and light as chiffon in weight, exquisitely woven by masterly hands, ensembled in a glorious palette of colours. "The Indian designers have given a new flair to the leather objects, producing styles with elegance and timelessness in both men's and women's fashions. The colours are tints picked from Indian flowers and create a heavenly aura. These designs are not only made of deluxe materials, but have wearability,

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functionalism and above all *beauty*. Though an Indian design was the base for each garment, it showed the individual star qualities of each participant. We have to constantly remind ourselves that 3000 years of experience lies behind this seemingly easy modern facade. Thus the commentaries ran, each paper highlighting whatever was its special fancy.

To us in India, the unfolding of this new situation made us aware of many wider implications. Factors that lay dormant, unnoticed came to light. Of late much shoddy Indian stuff had been flooding world boutiques with unfinished or substandard stuff, because of deliberately lowering the qualitative level of the objects to depress prices for a competitive export market. Thus had India been undermined economically and culturally. For a product is definitely enriched by superb craftsmenship, generated by a traditionally refined vision and imagination, all of which endow the object with added value but only when it is finished. We continue to denigrate a traditionally refined vision and imagination, which endow the object with added value but only when it is finished. We have continued to undermine by implication certain basic values and come to loose confidence in ourselves.

A bigger show was to follow in New York where echoes of Rome, the leather fashion capital, had already sounded, holding promise of equal success. But the tide in this leather project had already begun to recede. The show at New York got tragically reduced to a small hotel room with little publicity. Nevertheless, as a foretaste, orders worth nine million dollars were received straightaway. The full volume could only come after the commodity actually came on the market.

None of this however got any publicity in India. In the meantime the Indian leather workers, who were being initiated into the new techniques, had shown remarkable agility in mastering them, holding out a bright new future for their craft.

Then came a news item in the press that Indian leather was entering into partnership with an American company to market Indian leather garments in that country and India could expect rich dividends from this link up.

Frustrating as this was, one was incensed to receive from American friends paper clippings showing pictures of "new fashions in leather garments" as designed by some known American designer, which were the very ones made by our Indian women. Yet the garments advertised were the Indian designed ones, only the captions had been changed. Who can unravel this conundrum ? Those who had laboured for this wanted to salvage at least some

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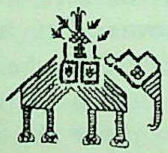
remnants for preservation. The beautiful garments were out of their reach, but pieces of the new "Star" leather, could be professionally preserved. So samples were labelled and deposited in the galleries of the Museum of Modern Art, New York, where experts could study and maybe reproduce and bring it into more popular use, so that the star may not fade completely into obscurity.

The project had ended however with orders to the value of nearly 14 million dollars including high fashion shoes. The official figures for leather exports for 1979-80 were $ 531.25 million, 29 *per cent more than the previous year*. So the venture had paid and held full promise for the future.

But one never heard a word more of this project, the Indian designers had won so much kudos from the fashion conscious and fashion critics abroad. "If beginners can turn out such striking forms, they can certainly prove a threat to us very soon," commented a noted Western fashion designer in high excited tones at the Rome Show. Then Gina Lollabrigda, herself a Star in this starry-eyed audience, broke out in a soft whisper which the whole crowd strained to catch in bated breath, as though the last judgement was being delivered : "India—it's a country filled with beauty, contrasts and culture. Tonight we are seeing the results of 5000 years of a tradition of excellence. *These designers* are stars and we are privileged to see their creations." □



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Sir William Jones

R. K. Dasgupta

I knew almost nothing about Sir William Jones till 1939 when Amal Home, then Editor of the *Calcutta Municipal Gazette*, asked me to do an article on the graves of English writers in the old cemeteries of this city for his weekly. I remember when I stood in front of the grave of Jones in the South Park Street Cemetery I was profoundly impressed by its epitaph composed by Jones himself : 'Here was deposited the mortal part of a man who feared God, but not Death, who thought none below him but the base and unjust, none above him but the wise and virtuous'. These were noble words to be said by someone about himself and I was curious to know about the life of the man who said them. But being in a hurry to produce the article I could not then go beyond inspecting his portraits, one by Sir Joshua Reynolds and another by Robert Home, his statue in the St. Paul's Cathedral and reading odd bits about him in what was then the Imperial Library. What struck me at the time was that there was not much to be read about him and almost nothing in my own language, Bengali. I thought Jones was not then a part of the intellectual history of a city where he worked continuously for ten years to acquaint the world with the law, letters and philosophy of our ancestors.

Six and seven years later, in 1946 to be exact. there was, however, considerable enthusiasm in this city about Jones when the Asiatic Society of Bengal celebrated the bi-centenary of his birth. Dr. Kalidas Nag who organized the celebrations asked me to take a small part in them by presenting a paper on Jones as a poet at a seminar on Jones as a literary figure. The 173-page *Sir William Jones Bi-Centenary Volume* published by the Royal Asiatic Society in 1948 gave us an idea of the great standing of the man in

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the world of oriental learning. I still possess a copy of this precious publication which includes a beautiful coloured reproduction of Sir Joshua Reynold's painting of Jones as a boy. The messages from distinguished individuals and institutions contained in this volume are important as documents of the learned world's profound appreciation of Jones's outstanding contribution to oriental studies.

Sir Richard Casey said that Sir William Jones's 'contributions in many fields towards the cementing of Indo-British cultural relations were formidable in scope and range'. The Chancellor, the Masters and Scholars of Oxford University said that Jones 'was the first Englishman to study Sanskrit and his was the privilege to have discovered that Science of Comparative Philology which traces the connection between languages and serves so well the cause of concord among nations'. The Royal Society of Great Britain said that the 'Indian Science Congress Association and the National Institute of Sciences in India may be regarded as the natural fruits of Sir William Jones's noble vision'. As Secretary of the Asiatic Society of Paris, J. Fillioza, the distinguished French Indologist, made a significant variation on the usual tributes by observing that 'the work of William Jones is not only that of an orientalist, but a grand human creation to which we should offer our homage'. It was, however, the Norwegian Indologist, Sten Konow, who stressed the value of Jones's work as a Sanskritist when he said that Jones 'was the first European who drew the world's attention to the exalted beauty of Indian poetry through his translations of Kalidasa's *Shakuntala* and Jayadeva's *Gita-Govinda*; to India's achievements in law, through his translation of Manu ; in astronomy and in mathematics and the invention of our numeral symbols through illuminating essays; he showed how comprehensive and how important the ancient Indian literature is, for the study of comparative mythology and comparative linguistics'. Sten Konow added that Jones 'was the first to publish an Indian text in Indian letters in Europe and to devise a really scientific transliteration of the Indian alphabet'.

Amongst our own tributes to Jones included in this *Bi-Centenary Volume*, the most important is an address on him which Suniti Kumar Chatterji gave at this Society on 7 January 1946. It was this address which aroused my interest in the life and works of Sir Willam Jones and I could have a glimpse into both, even as a layman, through A.J. Arberry's beautifully illustrated 40-page monograph on Jones entitled *Asiatic Jones* issued by the British Council in the same year. Perhaps the last two lines of the poem on

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Jones by Terence Armstrong who wrote under the pen-name John Gawsworth put a bit of Bengali patriotism in my enthusiasm for the great orientalist.

> Yet shall your Bengal beacon light
> Flicker on, and outshine their Elbis plan.

Today there may be some Elbis plan in Bengal itself. In 1946 we seemed to be waiting for some grand beneficent plan for the future of our country.

Luckily at about the same time I could buy from an old book-shop near College Square a full set of Sir William Jones's *works* in thirteen volumes published in 1807; the first two volumes being Lord Teignmouth's *Life and Letters of Sir William Jones*. I have been handling this set for thirty-seven years and yet I must confess I have not mastered its entire material. If I could I would have been able to claim that I have received a truly universal education from a great master of Graeco-Latin learning who was an equally great master of Sanskrit, Arabic and Persian.

As an undergraduate at Oxford it gave me a very special pleasure to see John Flaxman's sculpted memorial to Sir William in the ante-chapel of University College and through the kindness of the head of that college, Mr. Goodhart, I could also have a look at J. Heath's picture of him in its Senior Common Room. Mr. Norman Marsh, a fellow of that college and a teacher of Law told me that he had come upon a large number of unpublished letters of Sir William amongst the old papers of the Spencer family and although he was excited about the precious find he really did not know what to do with it. This gave me the impression that a large volume of Jones's letters would not be a commercially viable publication even in England. I did not however forget that there was not even a thin book on the man in the Bengali language.

About twenty years ago I received a parcel containing the manuscript of Dr. Garland Cannon's work entitled *Oriental Jones* sent to me by the Indian Council for Cultural Relations along with a letter from its Secretary asking me to offer editorial suggestions for the preparation of a press copy. I could not make out what really prompted the Council to choose me for the job to which I was obviously unequal. But there was just not the time to shift the responsibility to one who could really help the author with valuable suggestions. I found the work exceedingly interesting and returned the manuscript to the Council with some suggestions which were certainly inconsequential. When the work was published by the Council in 1964 it was found to be much more com-

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prehensive and analytical than the biography by Lord Teignmouth. Later Professor Cannon published a two-volume edition of Jones's letters including the letters discovered by Norman Marsh. I think the 215-page work on Jones by Professor Cannon has given a new dimension and a new depth to our studies in the life and work of the man whose image is not half so vivid in the biography by Lord Teignmouth. If at all we had been interested in the life of Sir William Jones we had almost concerned ourselves with the last ten years of his life in India where he died at the age of forty-eight on 27 April 1794. But his work in England during the fifteen years between 1768 when he graduated at Oxford and 1783 when he sailed for India to join the Supreme Court, Calcutta, as one of its judges, is important as the background of all that he achieved in Calcutta as an orientalist. When Jones arrived in Calcutta in September 1783 he had already established his reputation as an orientalist and as a man of vast erudition and great moral virtue. For ten years he had been a distinguished member of the Club of Dr. Johnson who called him 'the most enlightened of the sons of men'. In that club he came very close to the foremost figures in the intellectual life of England, Edmund Burke, Oliver Goldsmith, Sir Joshua Reynolds. He was also a friend of Gibbon and Joseph Warton.

He translated into French, at the request of King Christian VII of Denmark, a Persian work on the history of Nadir Shah and the excellence of the work obtained him membership of the Royal Society of Copenhagen. And Jones's French so pleased Louis XVI that he said that 'Jones understands the language of my people better than myself'. This was in the summer of 1770, this is, before his admission as a law student in Middle Temple, in September that year, and three years before his receiving his Master of Arts degree in Oxford in 1773.

His *Grammar of Persian Language* and his French work on the literature of the East appeared in 1771, his *Poems Chiefly Translations from the Asiatick Languages* in 1772 and his *Latin Work Poesos Asiaticae Commentariorum* in 1774. This extension of the intellectual horizon is a mark of the Eighteenth Century European Enlightenment of which Sir William was an inspired exponent. At this time Jones planned a kind of universal education which is summed up in Lord Teignmouth's *Memoirs :* 'it is necessary to understand the languages of those people who have been, in any period of the world distinguished for their superior knowledge...the more immediate object of education is to learn the languages of celebrated nations both ancient and modern'. So Jones contemplated a system of education which alone could promote a

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universal culture. When Arnold Toynbee upbraided Western-man for his intellectual provinciality, he missed in Europe the kind of intellectual oecumenicity which Jones upheld not only through his plan of education but more forcefully through his own literary labours which comprehended in its scope several major languages of Europe and Asia both ancient and modern. When Goethe spoke of his idea of World Literature to Eckermann fifty-six years later in 1827 he had obviously a universal culture such as this in his mind. But Goethe's own response to Indian literature strikes us as a negation of his idea of world literature. His ecstatic appreciation of *Shakuntala* occasioned by Sir William Jones's translation of the Sanskrit play in 1789 and immortalized in his famous quatrain on its heroine is certainly a cheering instance of a great European making a great Indian classic his own. But Goethe was not really an admirer of Sanskrit poetry and he thought a European brought up on Homer could not possibly be. In a letter to Humboldt dated 22 October 1826 Goethe said about the world of Indian literature that 'we who read Homer as our breviary...enter with a kind of uneasy fear those limitless spaces where monsters obtrude themselves upon us and deformed shapes soar way and disappear'. I am quoting these words of Goethe only to show how different was Sir William Jones's view of the literature of the East which he thought could become a part of the literary world of the European. In his preface to *Poems Consisting Chiefly of Translations From the Asiatick Languages* published in 1772, the year of his election as a Fellow of the Royal Society he says : 'The heroic poem of Ferdusi might be versified as easily as the *Iliad*, and I see no reason why the delivery of Persia by Cyrus should not be a subject, as interesting to us as the anger of Achilles, or the wandering of Ulysses. The odes of Hafiz...would suit our lyrick measures as well as those of Anacreon; and the seven Arabick elegies that were hung up in the temple of Mecca, and of which there are several fine copies at Oxford, would no doubt be highly acceptable to the lovers of antiquity'. Jones conceived an oriental antiquity as a parallel to the European antiquity, that is, he contemplated a kind of universal humanism of which oriental humanism and occidental humanism were to be the two important constituents. About a century later St Beuve, the French critic, spoke of such an enlarged world of letters in his famous essay—*What is a Classic ?*

That Jones exalted Sanskrit above Greek and Latin as a language was something very extraordinary to do for an Englishman of the last quarter of the eighteenth century. In his third

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annual discourse given as President of the Asiatic Society of Bengal on 2 February 1886 he said : 'The Sanskrit language, whatever its antiquity is of a wonderful structure ; more perfect than the Greek, more copious than the Latin, and more exquisitely refined than either'. Less than years later a Scottish Judge, Lord Monboddo, said that Sanskrit was brought into India from Egypt by Osiris and a little later a Scottish philosopher, Dugald Stewart, said that Sanskrit did not really exist and was but a forgery of the Brahmins. Actually even today Jones's admiration for Sanskrit poetry is not shared by some of the most eminent amongst the British Sanskritists. In his introduction to *Shakuntala* published in 1789 Jones calls Kalidas 'the Shakespeare of India' and the estimate is questioned by Sir Arthur Berriedale Keith who says in his *The Sanskrit Drama* published in 1924 that 'the style of the Shakespeare of India accorded by William Jones...must not blind us to the narrow range imposed on Kalidasa's interests by his unfeigned devotion to the Brahmanical creed of his times'. Whether Kalidasa is as great a poet as Shakespeare is not really the question Jones raises in his introduction to his translation of the play. All that he wanted to say was that the two belonged to the same class of poets if at all one could think in terms of a world literature. In his introduction to his edition of *Sanskrit Court Poetry* published in 1965 Professor Daniel H. H. Ingalls, then Professor of Sanskrit at Harvard, says about Keith that 'it is obvious from his works that for the most part he disliked Sanskrit literature'. This remark displeased Keith's pupil Professor John Brough who says in his introduction to his *Poems from the Sanskrit* published in 1968 that Ingalls just does not remember what Keith actually said about Sanskrit poetry. I am referring to this controversy only to say that Sir William Jones did not foresee such dispute in any serious comparative study of European and Asian poetry. He worked for a world of letters where the great classics could be judged as classics the judgement never being warped by any sense of polarity between civilizations. He even thought that knowledge of oriental poetry could bring about a new movement in European literature, stimulate a spirit of innovation in style, metre and theme.

Sir William Jones's *A Grammar of the Persian Language* is now outdated and English learners of Persian now read more recent works on its grammar. But Jones's 19-page preface to his *Grammar* is an important document in the history of European response to oriental poetry. No student of comparative literature interested in the history of the idea of world literature can ignore it without losing sight of an important milestone in that history. In the

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second half of the eighteenth century the University of Oxford where Jones was a student and don, oriental literature meant only Hebrew literature. Robert Lowth who was Professor of Poetry at Oxford for ten years between 1741 and 1751 lectured in Latin claiming that Hebrew poetry was as great as Greek poetry and that these lectures were received in Europe when they were published as *Lectures on the Sacred Poetry of the Hebrews* in 1753, mostly due to the fact that this poetry was a part of the Christian Bible. In England too the work became very popular when G. Gregory's English translation of it appeared in 1787. I possess a copy of this book and I often turn to it to see what amount of special pleading was necessary for an Oxford professor of poetry to convince the English reader that the Hebrew Muse was no less respectable than the Greek. We read Hebrew poetry in English and we think that to appreciate it as great poetry we do not need to compare it with the poetry of ancient Greece. Jones exalts Persian as a great language and he does not need to compare it with any other language to establish its greatness. Persian is a great language on its own grounds. And here Jones makes a very important contribution to the whole philosophy of our approach to literary traditions other than the Graeco-Roman.

As a student of English literature I was obliged to sit through tiring lectures on how Greek or how Latin were some of the finest things in English poetry. And I remember how relieved I felt when on the eve of passing out of the University I read an essay by Granville-Barker in which he said that while teachers of English would love to speak on the Senecan influence on Elizabethan tragedy the fact was that Elizabethan tragedy became truly Elizabethan and truly tragic when it altogether ceased to be Senecan. I am raising this issue of literary criticism because Jones urged a view of Oriental literature as a literature which could be appreciated, as such, without any reference to the literature of Europe.

In his preface to *A Grammar of the Persian Language* Jones says that 'The Persian language is rich, melodious and elegant ; it has been spoken for many ages by the greatest princes in the politest courts of Asia ; and a number of admirable works have been written on it by historians, philosophers and poets, who found it capable of expressing with equal advantage the most beautiful and the most elevated sentiments.' Jones regrets Europe's indifference to the literature of the East and in this, he says the Europeans are 'like the savages, who thought that the sun rose and set for them alone, and could not imagine that the waves, which surrounded their island, left coral and pearl upon any other shore'.

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No other European plea for studies in the literature of the East in the two centuries since these words were spoken is as profound and as powerful.

Sir William Jones concerned himself more with the poetry than with the philosophy of the East. And this is important in the history of Western response to oriental culture. Four years before the publication of Jones's English *Shakuntala* appeared Charles Wilkins's English edition of the *Bhagavadgita* and this work too was at the time valued as poetry. In his introduction to the English *Bhagavadgita* Warren Hastings said : 'I do not hesitate to pronounce the *Gita* a performance of great originality, of a sublimity of conception, reasoning and diction almost unequalled'. When Hastings said this Sir William Jones had lived in Calcutta for about a year and we can imagine that he shared this view of the work. This is again very important in the history of Western understanding of Indian civilization. Fifteen years later when Anquetil Du Perron's Latin translation of Dara Shiko's Persian version of the Upanishads was published and when later the German philosopher Schopenhauer came under the influence of this vedantic philosophy many in Europe thought that Hindu philosophy was life-negating and world-negating and was capable of spreading pessimism. The first important statement of the Western view of Hindu philosophy was made in Max Mueller's *Ancient Sanskrit Literature* published in 1859 and although Max Mueller later expressed a different and more favourable view of our philosophy and poetry in his Cambridge lectures published as *India : What Can it Teach Us* in 1883, a view such as this survives in Europe even today. In his *Indian Thought and its Development* published in 1935 Albert Schweitzer says that 'Indian thought in its very nature is so entirely different from our own because of the great part which the idea of what is called world and life negation plays in it. Sir William Jones never found any such polarity between European and Indian civilizations. He spoke of Asia as 'the nurse of sciences, the inventress of delightful and useful arts, the scene of glorious actions, fertile, in the productions of human genius, and infinitely diversified in the forms of religion and government, on the laws, manners, customs and languages as in the features and complexions of men'. I do not think Sir William mastered Indian philosophy in all its six schools ; but whatever he could understand of its nature in general gave him the impression that it had some striking affinities with Greek thought. And it is interesting to notice that greater masters of our philosophical systems, scholars like Max Mueller and Deussen also spoke of such affinities. In his

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Third Anniversary Discourse as President of the Asiatic Society he said : 'The six philosophical schools, whose principles are explained in the Dersana Sastras, comprise all the metaphysics of the old Academy, the Stoa and the Lyceum, nor is it possible to read the Vedanta or the many fine compositions in illustrations of it, without believing that Pythagoras and Plato derived their sublime theories from the same fountain with the sages of India'. This may seem not a little naive to the serious students of philosophy in our universities today. But let us remember that even such distinguished German authorities of Indian philosophy as Deussen says in his *The Philosophy of the Upanishads* that 'the deep fundamental conception of Plato and Kant was precisely that which already formed the basis of Upanishad teaching'.

I do not turn to Sir William Jones for some European testimonials about the quality of our poetry or philosophy. I look upon him as a great mind of the Eighteenth Century European Enlightenment who extended the horizon of that Enlightenment to the East and through his magnificent literary and scholarly works laid the foundation of the ideal of one human society sustaining one human civilization. And if we go deep into the nature of this extraordinary man, study his fine moral temper, his abounding humanity, that is, if we look at the man behind the scholar we will discover that his intellectual achievement was deeply rooted in his religious and moral convictions. He believed in virtue as the foundation of civilized life and placed moral rectitude above all considerations of private gain. He had to wait long for the confirmation of his appointment as a judge of the Supreme Court in Calcutta because he could not conceal his antipathy towards the Tory politics of North and Shelburne. He withdrew his candidature for a seat in parliament from Oxford because he favoured American independence. He was opposed to George III's encroachment on the rights of parliament and supported the Petition Movement for the restoration of the constitutional settlement of the Glorious Revolution of 1688. About his dislike for Toryism there is an interesting anecdote : When someone said about Scott, his competitor for the Oxford seat in Parliament, that he was a meritorious candidate Jones retorted that Scott was not merry, but he was certainly very Torious. His poem 'An Ode in Imitation of Alcaeus' is one of the finest songs of liberty in the English language. It was admired by Benjamin Franklin and was reprinted by the Society for Constitutional Information. 'What constitutes a

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state ?' the poet asks and his answer is :

Men, who their duties know,
But know their rights, and knowing maintain,
Prevent the long-chained blow,
And crush the tyrant while they rend the chain.

It may not be known to many in this country that Jones was a radical in politics and his noble words on slave traffic deserve a place in the literature of freedom. 'Sugar it has been said' he burst out at a meeting held on 9 September 1780 'would be dear if it were not worked by Blacks in the Western islands...but let sugar be as dear as it may be...it is better to eat none...than violate a primary law of nature...than rob one human creature of those eternal rights of which no law upon earth can justly deprive them.' There was an element of noble belligerence in Jones's liberalism and he suffered a good deal for this in the reign of George III.

Thus liberalism was rooted in a humanity, a kindliness of temper which made him so dear to all who knew him. There is a sentence in his letter to Lord Althorp, dated 17 August 1787, which I cannot read without being in tears : 'Instead of carrying my knowledge to market, I will publish all my new works here for the effectual relief of the insolvent debtors in our prison : they may want virtue, but they certainly want freedom ; and that is a title to my services.' In his preface to *Laila Majnun* Jones says that 'the property of the whole impression belongs from this moment to the attorney for the poor in the Supreme Court, in trust for the miserable persons under execution for debt in the prison of Calcutta.'

I do not think that I can even barely mention all the important works on the large variety of subjects on which Jones wrote. I have mentioned some of his major works on Asian literature. But we cannot ignore his works on law for he was no less distinguished as a jurist than as an orientalist. Actually one of his ambitions as a judge in Calcutta was to prepare a digest of Hindu and Muhammadan law and he did make a very important contribution to our jurisprudence. While in England he published his *An Essay on the Law of Bailments* in 1781 and Joseph Story, the American jurist, has said about this work that 'had Jones never written anything else he would have left a name unrivalled in the common law for philosophical accuracy, elegant learning and finished analysis.'

Jones was so disturbed by the Gordon Riots that he wrote in the same year of 1780 *An Enquiry into the Legal Mode of Suppressing Riots*. 'The security and consequently the happiness of a free people' Jones says in this essay 'do not consist in their belief,

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however firm that the executive power will not attempt to invade their just rights, but in their consciousness that any such attempt would be wholly ineffectual.' It was with him a firm conviction, as he said in a public speech given barely two years later, that the 'people of England can only expect to be the happiest and the most glorious while they are the freest.' And he trusted his people in spite of the popular violences of which we have such a harrowing description in Dickens's *Barnaby Rudge*.

In India Jones translated the *Laws of Manu* which according to Robert Lingat, the distinguished French authority on Asian jurisprudence 'is a most meritorius work...the basis of all later works *Manusmriti*'. Jones wanted to reorganize Hindu law as thoroughly as Justinian did the Roman and not satisfied with N.B. Halhed's *Gentoo Code* of 1776 because it was an English edition of a Persian translation of the Sanskrit texts. He asked a pundit in 1789 to compile a digest called *Vivadasararnava* which was never published. Between 1788 and 1793 he carefully supervised Jagannath Tarkapanchanan's compilation of *Vivadabhangarnava* which was published as a *Digest of Hindu Law* mostly in Colebrooke's translation in 1797. But all this was a great deal more than exercises in forensic learning. He desired that the Indian people should have their own laws even when they were governed by a foreign power.

'The idea of making their slavery lighter' he wrote to the second Earl Spencer on 20 February 1791 'by giving them their own laws is more flattering to me than the thanks of the company or the approbation of the King'.

In a work called *Oriental Influences in the English Literature in the Nineteenth Century* (1915) Marie E. de Meester speaks of the influence of Jones on some English poets and later Professor Sola Pinto discussed his influence on Gibbon, Southey, Shelley, Byron, Coleridge, Goethe and Tennyson. Obviously I do not have the space even to sum up the nature and extent of this influence. But I must not leave out Jones's on poetical works, particularly his hymns to Hindu gods and goddesses which I think are a great deal more than curiosities of Anglo-Indian literature. His 'Hymn to Naryana' which T.O.D. Dunn included in his *Poems of John Company* (1921) has an unmistakable note of lyricism :

Spirit of Spirits, who, through every part
On space expanded and endless time,
Beyond the stretch of lab'ring thoughts sublime,

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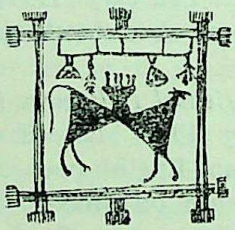
Badst uproar into beauteous order start,
Before Heaven was, Thou art.

This was written at a time when Christian Europe was giving its mind and money to a grand enterprise for the salvation of heathen India. And it was written by one who had courage to say : 'I am no Hindu, but I hold the doctrine of the Hindu concerning a future state to be incomparably more rational, more pious, and more likely to deter men from vice than the horrid opinions inculcated by Christians on punishments without end.'

Jones believed in a Supreme Being beyond man's comprehension and in one of his later poems he speaks of him in words which appear to have vedantic overtones :

'tis one vast eternal mind
Too sacred for an earthly name. □



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Non-Alignment and World Peace

H.Y. Sharada Prasad

Peace* is more than the absence of war. It is the active promotion of a state of mind which will oppose the roots of war : hate and the instinct of aggression and fear. An ancient Indian paean to peace, almost 3,000 years old, has a contemporary ring :

> Peace in the sky, peace in the mid-air,
> Peace on the earth, peace in water,
> Peace in plants, peace in forest trees,
> Peace in all things,
> Peace in peace—
> May that peace come to me.

I shall not claim the non-aligned alone want peace. Everyone who thinks consciously about life wants peace, whether he or she lives in the West or the East or in non-aligned countries. Even the Governments of the aligned countries are theoretically committed to working for peace—judged by their numerous statements reaffirmed again and again. But a person from the non-aligned world would ask them, echoing Jawaharlal Nehru, whether preparing for war is the best way of preparing for peace. (In the course of this talk you will find me quoting Jawaharlal Nehru copiously : it is an Indian disease from which even those Indians who differed from Nehru suffered !)

When World War II ended, friends became foes and foes friends. An East and a West were born in confrontation with each other. The end of the War also sounded the knell of the empires which had dominated the world during the preceding century or two. India, the keystone of the arch of the British Empire, became

*Text of a talk delivered at the 27th International Seminar for Diplomats in Salzburg in August 1984.

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free in 1947, and Burma and Sri Lanka about the same time. Indonesia's freedom was recognized in 1949 although it had been proclaimed in 1945. Ghana in 1957 led the African procession to freedom. These two phenomena—the bipolarization of the older, developed nations into rival blocs and the emergence of a series of independent nations—interacted to produce non-alignment.

To comprehend non-alignment it is important to keep in mind its anti-imperialist origin. The non-aligned stayed out of the Western bloc because it was from countries belonging to that bloc that the non-aligned nations had achieved liberation. And they were not subject to the factors which produced the Eastern bloc.

The West's assumption of ethical superiority had not impressed these countries too greatly. Their own experiences did not sustain their claims to equality or fairplay. Furthermore, only a few years earlier it had been proclaimed that the Four Freedoms, for the protection of which the West had been fighting, would not be extended to colonies.

At the Asian Relations Conference, which was called in March 1947 in New Delhi, Jawaharlal Nehru declared : "Far too long have we of Asia been petitioners in Western councils and chancelleries. That story must now belong to the past. We propose to stand on our own feet and cooperate with all others who are prepared to cooperate with us. We do not intend to be playthings of others."

In the view of newly free nations, to be aligned meant to continue to be playthings, as decisions would be taken elsewhere. To "stand on our own feet" demanded a visible break from any suggestion of dependence in matters of foreign policy. One reason why India, in particular, had to demonstrate that its foreign policy was self-propelled was a strange historical anomaly. India had been a member of the League of Nations in 1919 and a founder member of the United Nations in 1945 without being a sovereign nation! In other words it was part of the British bloc which itself was part of the Western grouping. Independent India had to cut this umbilical cord. Thus, to India, non-alignment was the very test of sovereignty.

Three statements of Jawaharlal Nehru bring this out clearly :

> "What does independence consist of? It consists fundamentally and basically of foreign relations. That is the test of independence. All else is local autonomy. Once foreign relations go out of your hand, into the charge of somebody else, to that extent and in that measure you are not independent."

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> "The only possible real objective that we, in common with other nations, can have is the objective of co-operating in building up some kind of world structure, call it One World. If we think of that structure and our cooperation with other countries in achieving it, where does the question come of our being tied up with this group of nations or that group ?"

> "We propose, as far as possible, to keep away from the power politics of groups aligned against one another, which have led in the past to world wars, and which might again lead to disasters on an even vaster scale."

These lines from a person who is identified, not in India alone but elsewhere, with the conceptualization and practice of non-alignment also make it clear that non-alignment does not mean non-involvement or isolation. It is but fair to note, however, that India is not the only (or the original) home of non-alignment. Most newly free countries adopted non-alignment for their own historical reasons. To all of them, however, it was a demonstrative gesture of the rejection of tutelage. It is no surprise that among the non-aligned, the fervour for the concept is more marked among those who fought for their freedom than those who got it mainly due to the momentum of decolonization. As a general proposition it could be stated that non-alignment is the natural expression of the nationalism of newly emerging nations. Even in the case of Yugoslavia, which can not be described as "newly free", non-alignment embodied the assertion of national identity and independence of judgement. This surfaced publicly as early as 1945 in the exchange of correspondence between Yugoslavia and the Soviet Union over the claim to Trieste. And Edward Kardelj told the United Nations in 1950 :

> "Yugoslavia cannot accept that mankind must choose between domination by one or other great power. We consider that there is another road..."

If that road did not lead from the West, neither did it lead from the East. The basic criterion of the Eastern bloc seems to be geographical contiguity with the Soviet Union. The countries of Asia and Africa had viewed the Soviet Union as an opponent of their erstwhile overlords and hence a tactical ally but not as a new master to whom allegiance could be transferred. It is true that a few among the newly free countries who opted for non-alignment did adopt the Communist ideology. But they chose non-alignment as well, out of a determination to stand up to a dominant power

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next door. For Yugoslavia it was the Soviet Union, for Cuba it was the United States of America, for Vietnam it was China. It is because non-alignment has come to be considered a criterion and proof of the political sovereignty of newly free nations that there has been a steady growth in the membership of the Non-Aligned Movement from 25 (not including observers) in 1961 to 100 now. Even nations which once had gladly cast their lot with one of the blocs later strove hard to obtain membership of the non-aligned group.

Two other basic points about non-alignment should also be made at this stage. The first is that the non-aligned did not and do not regard themselves as a bloc.

They do not have a centralized military apparatus. They have no political apex. They do not have a secretariat. Although, as has been pointed out, they have evolved "procedure-building for participation, organization, interest articulation and aggregation and international communication", J. Bandopadhyaya : *The Makings of India's Foreign Policy*" (Allied, New Delhi, 1980). For years they even eschewed the expression the "Third World", although it has latterly gained currency, mainly in the context of international economic diplomacy. To some extent it is possible that the expression has been promoted to dilute the political content of non-alignment. It is also likely that the engineers of international psychological conditioning find the suggestion of inferiority that the word "third" connotes convenient.

The second point is that there is no idelogical similarity amongst the countries of the non-aligned group, either in the patterns of their own domestic organization or in their economic, political and cultural relationships.

Within the Western and Eastern blocs there is a certain amount of political likemindedness—more in the Eastern perhaps than in the Western—and also a certain amount of similarity in the levels of technological advance attained. But while almost all non-aligned countries are technologically underdeveloped (including the oil-exporting ones which have high per capita incomes), they are very disparate in their governmental systems. Mention any form of political structure : monarchy, multi-party parliamentary democracy, one-party rule, military dictatorship, dictatorship of the proletariat, benevolent oilgarchy, republic with lifetime president, you will find it in the non-aligned world. There is no organic connection between non-alignment and any particular political faith. The determining factors are a residue of colonial experience or resistance to a dominant power, and the staying out

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of open military command systems. Non-alignment to many is a means of safeguarding the national interest but not on exclusive mode of doing so. A commentator goes to the extent of describing non-alignment as "a thoroughly respectable cover for independence of choice and action from a variable menu with different courses, except formal membership of a military alliance." He accuses many non-aligned of trying to derive the benefits of alignment without the necessity of formal military alliance.

Having entered these caveats, one must still say that most non-aligned are not too greatly impressed by the ideological eloquence of the two blocs. To them the East-West confrontation is primarily political and military rather than a contest of Right and Wrong, Truth and Untruth, Light and Darkness contending for the world's soul. The attitude of many non-aligned countries towards those in the blocs is an aggregate of intricate and contradictory emotions. There is the smarting memory of the master-serf relationship : of hurt pride, of denied opportunity, of patent injustice, of racial arrogance, of economic exploitation, of the fracture of old aesthetic and cultural traditions. There is also the recognition that colonialism itself served as a conduit of new knowledge : not only ideas of political freedom, human rights, and rule of law, but the whole new wealth of science ; together promising individual and corporate strength. There is then the realization that political independence has not meant the end of economic and intellectual dependence. It is a complex collage of resentment and admiration, denial and acceptance, assertion and diffidence. If the affluence and power of the advanced countries evoke envy, the non-aligned feel impelled to reject their claims to greater wisdom. If one factor, above all, convinces them of the folly (and even the dangerousness) of the strong, it is their possession of nuclear weapons.

The war of 1939-45 ended with a nuclear bang (rather, two of them). There was a sudden quantum jump both in the destructive power of weapons, the number of people they could kill or maim, the area they could devastate, and in the economic costs of the whole business of war and defence. In the eyes of the non-aligned, nuclear weapons represented a tragic, terrible waste of resources, especially when three-fourths of the human population inhabiting developing countries was in such dire need of the sinews of economic development. In the very first formal conference the non-aligned held at Belgrade in 1961 the focus of attention had changed from national liberation, the earlier principal concern of the non-aligned, to the need for preventing nuclear confrontation and promoting nuclear and eventually general and total disarma-

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ment. The statement issued after the conference described its purpose as "contributing to world peace and security and peaceful cooperation." It went on to say : "War has never threatened mankind with graver consequences than today. On the other hand never before has mankind had at its disposal stronger forces for eliminating war as an instrument of policy in international relations."

Opposition to any deepening of the confrontation between the blocs and unreserved commitment to nuclear disarmament, collectively adopted by the non-aligned nations as two of their principal objects, have been reiterated at the later summit conferences held in Cairo in 1964, Lusaka in 1970, Algiers in 1973, Colombo in 1976, Havana in 1979, and New Delhi in 1983. The non-aligned have always regarded themselves as partisans of peace. At the New Delhi session, Mrs. Indira Gandhi described non-alignment as history's largest peace movement. The non-aligned argument is best summed up in her own words :

> "Development, Independence, Disarmament and Peace are closely related...Each day, each hour, the size and lethality of nuclear weapons increase. A nuclear aircraft carrier costs $ 4 billion, which is more than the GNP of 53 countries. The hood of the cobra is spread. Humankind watches in frozen fear, hoping against hope that it will not strike. Never before has the earth faced so much death and danger. The destructive power contained in nuclear stockpiles can kill human life, indeed all life, many times over. Yet...the arms race continues. New areas are being brought into the scope of strategic grouping, military blocs and alliances."

The question may legitimately be asked : "What impact would such pious declarations on the part of non-possessors of nuclear weapons have on the decisions of nuclear-weapon powers ? How do the non-aligned really help peace ?" Primarily as persuaders, as a group exerting pressure on the big powers who are the decision-makers. They are aware of the inherent limitations of weak nations to influence decision-making decisively. Their method is "oblique, indirect, persuasive." Also the non-aligned countries feel that their very existence is a vital factor for safeguarding world peace.

The non-aligned, in addition, think that because of them even the countries with the blocs have been infected somewhat within the non-aligned sentiment. They find a greater tendency amongst the junior partners of blocs to assert national individuality and

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growing opposition to war and to agendas of larger production and deployment of nuclear weapons. A significant moral victory gained by the peace movement is that Governments today are defensive, even apologetic, about nuclear weapons and delivery systems. In ancient India, wealth had to be proved by giving it away. In the present-day world, nuclear stockpiles have to be justified on the ground that they assure peace. This very guilt feeling probably contains whatever little hope there is for Man prevailing over the Bomb.

It would not be right, however, to think that the non-aligned claim all the credit for the anti-war sentiment within either bloc. That sentiment arises from the direct experience of horror lodged in the memory of the nations which participated in the two World Wars. But the realization that a very large segment of humanity stands out of the conflict strengthens the motivation of those within the blocs who feel that bipolar confrontation is not inevitable. To all these people, the exertions of the United Nations and its agencies and of more informal gatherings are of more than symbolic or verbal importance. It is because the constituency of peace has grown everywhere that the legislatures of many aligned countries have adopted resolutions in favour of peace and nuclear disarmament and exercised some check on the military budgets of their governments.

The non-aligned have in fact directly contributed to the preservation of peace on specific occasions and issues, throwing both their numerical voting strength and their conviction on the side of compromise in proposals before international organizations. Jawaharlal Nehru and other leaders of non-aligned nations helped the adoption of the Test Ban Treaty. The course of history of our time would have been somewhat different if the caution administered by India and the non-aligned at the time both of the Korean war and the Vietnam war had been heeded. India had warned that the crossing of the 38th parallel would bring China into the war but President Truman dismissed it because he did not approve of the then Indian Ambassador to China, Sardar K. M. Panikkar. To the U.S. his judgement was tainted because in its view he was too soft on Communism. The U. S. forgot the fact that Sardar Panikkar was an outstanding historian of Asian nationalism. More recent is the Vietnamese experience of reading signals wrongly.

Any argument that a non-nuclear power cannot influence the course of nuclear disarmament would, when extended, mean that to gain such influence they should acquire nuclear weapons ; in

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other words, the more the proliferation, the greater the chances of deterrence. Not all non-aligned countries which have the technological capacity to produce nuclear weapons went to join the club. India is an example. India is convinced that possession of nuclear weapons does not enhance security. Along with other non-aligned countries, India rejects the doctrine of deterrence. In their view the steady escalation in the level of nuclear armament to a level of manifold overkill is itself a repudiation of the validity of deterrence.

But the non-aligned are often twitted that while they are vocal in denouncing deterrence, in practice they are expanding their own stockpiles of conventional armament and that many are only too willing to tread the nuclear path if only they could, and that some are known to be attempting to do so. A spokesman from a non-aligned country, in particular one coming from India with its associations with Mahatma Gandhi's non-violence, would also be asked how he would explain the fact that non-aligned countries have been involved in so many of the wars that have occurred since World War II. If we go through the list, we would find that many of these wars have directly involved one or another major aligned country, whose objective has been to enlarge its area of influence. In some others, big powers have been in the wings, encouraging and arming the combatants, and awaiting the outcome. These could be called proxy wars. In fighting some of these the client countries have not been motivated so much to advance the cause of either bloc as to avail themselves of military assistance for settling their own scores.

However, not all wars between non-aligned countries can be labelled proxy wars. A good many of them are clashes between competing nationalisms. Itself a product of nationalism, non-alignment cannot be expected to repudiate the implications of nationalism. It would be untenable to expect non-alignment to override the attitudes and reflexes accumulated through history. While non-alignment might outline a framework for the settlement of disputes, it is not a bullet-proof vest. Therein it differs from traditional neutrality which was a recognized legal status in which some nations, by repudiating in advance any military involvement, bought immunity. Nor is non-alignment always pacifist. While opposing global wars, the non-aligned have sprung to the support of armed liberation movements. This, however, should not detract from the sincerity of the non-aligned nations' work for world peace and their opposition to ideological crusades and nuclear confrontation between the blocs.

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Another dimension to the non-aligned nations' work for peace concerns economic disparities among nations. The threat to peace, in the non-aligned view, comes not only from weapons, conventional or nuclear, but from disparities among nations. Throughout history, the rich have been vulnerable and have been afraid of the poor. But preoccupation with problems internal to the developed world, one of which is the military balance between East and West, has prevented the advanced countries from adequately appreciating the threats to peace that the North-South rift might pose. Nations have some awareness of the threats to domestic order that disparities generate. Even within affluent nations there are frequent outbursts by deprived sections. But the distress of the poor in rich countries is nothing compared to the plight of the poorest in poor countries. Violence comes out of disparities as oaks grow out acorns. Domestically this is known. But there still is inadequate appreciation of the international political turmoil that economic disparities among nations could cause. Economic dislocation of trade and other relations would be the obvious first expression of such turmoil. It should not be thought that affluent countries live in a separate world in which the Cabots speak only to the Lodges. They are dependent upon poorer countries for raw materials for their industry and for a hundred and one things that their consumption patterns regard as the ingredients of the good life (from tea and bananas to ivory and emeralds). Even now developing countries absorb 23 per cent of the exports of the industrially advanced. Apart from dislocation of trade, it is necessary to forestall the greater danger of an outbreak of international violence. National frontiers today are no barriers to organized violence. So the persistent and passionate plea of the dispossessed for greater economic cooperation is not merely a ruse to get more money—it is not beggary in diplomatic garb ; it is a realistic warning about a danger that must and can be avoided. The non-aligned nations' advocacy of the New International Economic Order is thus in the collective interest of the world. As the Economic Declaration of Seventh Non-Aligned Summit has put it : "The crisis of international economic relations and the widening gap between developing and developed countries have emerged as most serious problems and a source of instability threatening world peace and security."

All argument about non-alignment finally comes down to the question : What can the weak do ? The poet-philosopher Rabindranath Tagore examined this question many years ago. Writing on

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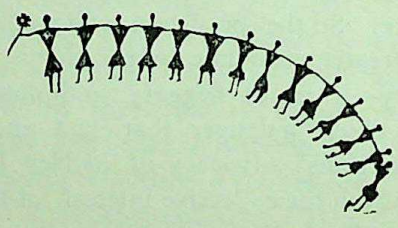
the nature of power in the modern age, he said :

> "But can powers find equilibrium in themselves ? Power has to be made secure not only against power, but also against weakness ; for there lies the peril of losing its balance. The weak are as great a danger for the strong as quicksand for an elephant...The people who grow accustomed to wield absolute power over others are apt to forget that by so doing they generate an unseen force which some day rends that power into pieces."

The non-aligned have by and large represented such a force.

But they do not seek confrontation. Rather, all their collective endeavour is directed towards its avoidance. It is thus that they hope to serve peace now and ensure the continued existence of man in a better state of general tranquillity and increasing prosperity of even the lowly and the last. □



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Daughter

Keki Daruwalla

It was still about two hours to midnight. Ardeshir was at his prayers, a black velvet skull-cap on his head and the double stranded sacred thread held loose in his hands. His feet were planted about two feet from each other and he was swaying from side to side as he mumbled his prayers, the weight of the body shifting from one leg to the other almost rhythmically. As he intoned the names of the three hells of the Zoroastrian Cosmos, *Dushmata, Duzukhta, Duzvarshta,* he lashed the air with the sacred thread the way one snaps a whip to egg on a lazy cart horse. When you mention satan (*ahriman*) or one of the hells he reigns in, some action indicative of strong disapproval must accompany the mouthing of the name. A medieval Assize passing sentence on a witch or a heretic could not have done so with greater vehemence. In his condemnation of evil Zoroaster was as severe as the semitic prophets who followed. Fire and brimstone. But when Ardeshir intoned the name of the good Lord Ahura Mazda, he took the sacred thread respectfully to his eyeballs. He lifted his shirt-hem, holding it fast with his chin against his chest, as he tied his prayer-knots, one in front at the navel, and the other on the tailbone. That done, the shirt-hem fell in place and the side-to-side rocking started once again. Another fifteen minutes and the prayers were over. Ardeshir bent his arthritic back and touched the ground three times with his fingers in homage to the painting of Zoroaster. The salutation took in also the cotton wick which sputtered with flame in a small glass containing oil, burning under the photograph of his dead son. The oil lamp, the photograph and the prayer book, *Khordeh Avasta,* were all placed on a corner table. Over it loomed the stylized portrait of the prophet, his muslin garments fluttering as if he was standing in front of a pedestal fan, a trident in his left hand and

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the forefinger of the right hand held aloft to proclaim that there was only one God. One could almost date the things portrayed. Those folds of gauze-like muslin in which Zoroaster was wrapped came in obviously after the eighth century migration to India. The forefinger came in after the passionate monotheism of Islam. And that blond beard obviously after the English had conquered India. So there you were, half the history of the levant recorded in a swatch of paint.

The prayers over, Ardeshir devoted himself to the closing of doors and the fastening of windows of their Sunder Nagar house. Each evening he supervised this operation hovering next to their domestic, Shyam Singh. And once Shyam Singh left, the ritual started again, each window being put through close scrutiny. Were the upper and the lower latches embedded firmly in their slots ? Was the bathroom door properly closed ? Half the thefts occurred through the bathroom. A skylight or a window left open for the night and what all the man had to do was to force the bars wide enough for a slim man to slip in. Then if the door to the bedroom was not bolted from the other side, you, were in trouble. He never ceased to worry at this phenomenon. Out in the night the biggest thieves, crooks, kidnappers, rapists could be prowling around sticking their knives into people, or hopefully, into each other. But here, encircled by the four walls of your house, with every door latched and all the fastenings in place, you were as secure as the crown jewels in the Tower. That was what civilization was all about. The men who first rolled a large stone to the cave-mouth and slept peacefully had no idea that they were actually ushering in civilization itself. The wheel, writing, airflights, Mr. Nixon and condoms would all follow. But once someone gained entry inside, it was as good as being sold to the devil. You were then in the clutches of naked evil. It could do what it liked with you, beat you on your spine with a rubber hose, force out your nails or set fire to your hair. Rendered powerless and impotent you could merely watch a fount of satanic evil erupt in front of you. When people said their prayers at night they were perhaps thanking the Lord for everything. Fathomless satisfaction, that is what most people suffered from. And then an agent of evil got inside and their worlds collapsed about them in a way their cramped spirits could never have imagined. These very four walls then made you more vulnerable for now you could not break out, while evil prowled inside with its daggers unsheathed.

It was July now and the big desert cooler was in disuse, and the water had been drained from the tank. Now and then for an

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hour or so Ardeshir switched the exhaust on to blow the cool night air inside. Dressed in his white pyjamas and his muslin vest he started walking up and down in the verandah after switching off the light. He walked barefoot, a spectral wisp of a shadow moving across the windows lit up spasmodically by bars of the distant that street light fell in faintly luminous stripes across the windows.

His bed creaked as it received him. It too was getting old, he thought. As for him, he would be joining the ranks of the *nouveaux pauvres* the next year when he retired. The climb-down from one's salary to living on the monthly interest of your Provident (and how provident !) Fund was considerable. But in a way he was impatient for the day and wanted to be done with it. For the last five years he had started calculating time backwards from the date of his retirement. There was something unnatural and retrograde in the clockhands moving backwards. It was akin to a reversal of the season cycle. All that would end, this time-spool running backwards once he retired. Or would it ? Wouldn't his imagination now habituated to cut off dates start counting backwards from some vaguely notional death-date ?

His wife Firoza's face was a bit puffed up in the morning, as if some blister fly had bitten her just under the eyes. He overheard her talking to their daughter in an inaudible, low-key murmur. He heard her opening the lock of a wall cupboard in their room and rummaging among the clothes. He knew what that meant. Arnavaz must have had her period. Once that happened she was to wear only a shirt and a pair of jeans laid aside just for this. Also a skirt which he had come to recognize, a flaring knee-length skirt with blazing floral prints which had been handed down from the wide hips of her aunt Beroz. He also knew the two frayed night dresses set apart for her during her 'time' as Parsee women would put it. Come to think of it the usage was not really off mark. In fact it was quite close to what the Americans would call doing time. Because with the onset of the period a hundred taboos descended on the woman like a flock of vultures. She could sit only on one particular chair, made of aluminium piping, eat in one particular plate made of steel and sleep on an old iron bed with iron springs. Metal could not be defiled. Once the period was over she was to shampoo her hair and change into normal clothes. There was also a change of linen in the room. Only books, school-bags and her tennis racket remained unchanged, immune to pollution.

Still at breakfast he absent-mindedly asked Arnavaz to fetch his specs and the Sunday paper. She made no move as if she had not heard him and Firoza glared at him disapprovingly, the

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eyelids opening wide for a flickering fraction of a moment. Though paper and glasses could not be polluted, he should not have asked her. He pushed his chair back and got up slowly, walked to the front door, bent down and picked the paper up from under the door leaves. Holding his left hand to his lumber region, he got up and walked back slowly to the table.

It was then that he glanced casually at her feet and noticed with surprise that she had been neglecting her nail polish. He remembered how only some year back Firoza had insisted on painting her toe-nails barely an hour before being admitted into the hospital for her tubectomy. And frugal as she was, every once in a while she walked into a Beauty Clinic (no one called them Saloons anymore, he wondered) for a manicure. At the moment the nails were an unwholesome white, both at the edges and near the cuticle. There must be something very seriously wrong, he thought, to have made her neglect herself in this manner.

Leaving Bombay had been his original sin. That at least was what Firoza thought. To leave Bombay and the community, the whist parties at the Dadar Parsee Gymkhana, the *bhelpuri* at Chaupati and the odd ice cream at the Parsee Dairy Farm was unthinkable. She felt nostalgic for those sacred thread ceremonies at the Colaba Fire-Temple and those weddings at the All Bless Baug. Parsee weddings if you please, where you displayed your heirloom diamonds and rubies, not those *Marwari* affairs where you were weighed down with maunds of gold, looking for all the world like a bullion market. Wedding feasts where you tucked in enough to last you a week, not just the chicken and the steamed coconut-and-coriander fish and the chips-and-meat with its thick, spicy gravy, but also fried eggs. And you topped it off with a custard, that was perhaps the first dessert the Parsees learnt from the English and it had become the traditional wedding dessert.

To have left Bombay for Poona or Lonavla or Karjat was one thing. But to leave your house and bank in Bombay and to come and live with the Punjabis in Delhi ! That was madness. In the five years he had been in Delhi, Ardeshir (Adi to his friends). Bilimoria thought he discerned a substratum of reproach in probably every word his wife spoke to him.

It was a hot and sticky July morning. Arnavaz had put on her *salwar-kameez* after her bath and he found her standing in front of the mirror busy with her cosmetics. He walked over to Firoza. "Where is she going in this heat ?" he asked, conscious of a querulous note creeping into his voice.

"Why don't you ask her ?"

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Ten minutes later, Firoza stopped abruptly in front of him during one of her visits to and from the kitchen.

"So you didn't ask her. Courage deserted you, as it always does, when it comes to speaking to your daughter. Not one unpleasant question will you risk, will you ? Every harsh word must come from me!"

After a minute's pause during which she opened the refrigerator, took out a milk jug and placed a few eggs in a bowl, she said, "And I will tell you where she has gone. She has gone to Anwar!"

"Did she tell you that ?"

"She did not ! As if she tells me *anything* !"

She stamped into the kitchen, her heels pounding on the floor. An hour later he tried to appease her even though he read the storm signs on her face, lips quivering and eyes at the brink of tears.

"There is no need to spring to conclusions" he said soothingly, trying hard to keep irritation away from his voice. "How can you be certain where she has gone and with whom ? Even if she has gone to meet Anwar—"

"So what ? That's what you were going to say isn't it ?"

"That is not what I was going to say", he said, trying hard to get a grip over himself and keep his temper under the carpet. "I wish you wouldn't interrupt. What I was going to say is there could be a perfectly harmless reason for meeting Anwar."

"Such as ?" she let the question hang in the air. He noticed her lips, two horizontal cracks of sarcasm that separated the well-fleshed face from the small mouth.

"I can't tell you offhand, but it could be anything. She could have gone to return a book, for instance." He started feeling a little less sure of himself. "There can be a hundred reasons why one human being meets another", he added forcefully. What he lacked in certitude he made up with vehemence.

"Wouldn't you like to be certain Ardeshir ? Wouldn't you like to ask Arnavaz whether she went out with Anwar ? A specific question mind you, looking her right in the eyes, not a vague interrogative with your eyes peering sideways or downwards as if it was you who was guilty."

"Nobody is guilty, Firoza ! Your imagination is running away with you." She had obviously had enough by now, "When one fine day somebody runs away with your daughter, and a Muslim at that, then I'll see who talks about guilt. Then guilt will hang around your neck like a...a stone." She had wanted to say

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'millstone' but the word did not come to her readily and because of the lunch she was cooking, the word which had naturally surfaced up was 'grindstone'. She was speaking with the kind of intensity that did not come easily to her. Years of disillusion and indifference had left their sediment-layers on her soul. One could not go to the extent of saying that their marriage was fraying at the seams but mutual respect had certainly become a casualty of advancing years. He looked down on the pettiness of her concerns. She in turn despised the paucity of will in him.

Anwar came from Pathan stock, had studied in Delhi and landed a good job with the Grindlays Bank. Arnavaz had met him at parties at the houses of her father's banking colleagues. Ardeshir was the Manager of a Central Bank branch. He had nothing against Anwar. He was fair and good looking, though not as tall as Pathans are. He had a low, modulated voice and could speak knowledgeably on many things including music. Sitting alongside Arnavaz on a setes he had talked about Zahrin Daruwalla and her *sarod*. Arnavaz had heard the name, but that was all. If it came to the crunch she should have been hard put to distinguish between a *sarod* and a *sitar* or any other Indian string instrument. But when she switched the conversation to western music she found him speaking authoritatively on everything from jazz and blues to Bach and Mahler. And he spoke with such warmth. What a change from her careworn, taciturn father, and her mother, who for quite some time had been estranged from all pleasures, stronger on prohibitions than on enthusiasms.

Ardeshir was determined to confront Arnavaz on her return. He had to show the wife that he could be firm when he wanted. As usual, she walked straight into her room, got hold of a book and plonked herself on the bed, tossing aside her sandals rather impatiently. Standing at the door he asked her, "Where did you go ?" He wanted to sound real casual but tension broke through the voice. Arnavaz kept on reading her book.

"Did you go to Anwar ?"

She lowered the book slightly, so that she could look him in the eye, and then raised the book again.

"Did you go out with him somewhere ? To a movie or something ?"

She put her book down now, looking at him impassively as a jelly-fish.

"Come on, I am waiting for an answer !"

"O Papa", she said. Then the doorbell rang. The neighbour wanted to telephone. And that was it. He never could bring

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himself to take up the subject with her again.

In the evening he took a walk by himself. From his house in Sunder Nagar he strolled down the Cornwalis Road, starting from the remnants of the Old Fort, those disjointed mausoleum-like buildings inhabited by bats and echoes and horse-dung, and ending up with the Lodhi Gardens. But he had no eye for landscape today. His mind had got swamped with that one overwhelming question, what would happen if Arnavaz lost her heart to this Anwar. Some of his Parsee confreres would laugh their silly heads off, he thought. He had always been liberal minded and what was worse had acquired this kind of a reputation. And his interest in Islam had always been pronounced. He remembered the occasion when someone had mentioned Islam and fanaticism in the same breath. He had rushed to the ramparts, swords out, as it were. It was the crusaders who were fanatics, he had shouted. It was the likes of Richard *coeur de lion* and his marmydons in their clanking chain-mail, wielding their two handed broadswords and all their talk about the "heathen soldan" (that was saladin, if you please) which had evoked this irrepressible urge to survive and convert to Islam. It was as logical as the workings of nature, he remembered to have said. If one thousandth or, in some cases, one millionth of a larva survived, it ensured the survival of a species. Look at the over insurance involved. So the Arabs proselytized. It was as simple as that.

Then there was the time his Aunt and Uncle had come from Karachi. His Aunt had passed some derogatory remarks about the Arabs and had gone on to say that it is from the Persians that the crescent caught its glory. He was appalled. He wasn't going to take this lying down. He harangued her for half an hour on the splendours of Jerusalem, Constantinople, Cordova, the massive Dome of the Rock with its intricate calligraphy, the mosaics from the great Umayyad mosque at Damascus. He talked of the Arabs and the Turks, the efflorescence of the culture, their mathematicians, astronomers, physicians, poets. He rattled off the tongue-twisting names, Al-Khawarizmi, one of the founders of Algebra, Al-Kindi, who as far back as the ninth century ridiculed alchemy, Abu Rehan Alberuni who discovered that light travels faster than sound. But it was when he spoke of the Moor poets of Andalusia that his eyes lit up and he noticed his Uncle and Aunt making visible efforts to suppress a smile. It all came back. What would they say now ?

That is what a little learning does to you, he reflected bitterly. Immediately people of your own ilk start giving you queer looks, as if you are, what the Americans call, an oddball. If you were as

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blinkered as the others, no one bothered. You were a part of a group and your own attitude became a part of a group prejudice, patina-work on a larger mosaic.

He realized with a slight jolt that he had crossed the Humayun Road which branched off to the right of the road he was walking on, without even looking out for any possible traffic. He got hold of himself and noticed pedestrians, cars, scooters for the first time, as also the mosque protruding on to the sidewalk. He had the eerie feeling of having been flung from a limbo into the heart of the screaming world. He had never felt so vulnerable as at this moment, with all his sense perceptions suddenly under attack.

At Sujan Singh Park he was handed over a leaflet by a college student. "Rise to support the struggle of the Fighting Masses and Students of Iran", said the leaflet in thick black print. It talked of 15,000 people having died due to bombing of residential areas in Kurdistan. "The bombers attacked the Turkman Peasants' Soviets last month and then the anti-people army and the Islamic Guards let terror loose in Turkman Sahara and executed thirty revolutionary Turkmans." As he read the leaflet, standing on the pavement, Ardeshir found his thoughts wandering back to a lecture he had attended in the Birla Auditorium in Bombay in 1979. Ardeshir was spending his annual leave in town when an Associate Professor of Iranian Studies in Columbia University had come and lectured on "A Western Response to Zarathushtra". He had talked of evil presenting itself to Zoroaster in a stark and naked form. Zoroaster had called this wanton, violence "*aesma*", akin to the Persian "*kheshm*", which means fury. In the Zend Avesta, this violence, fury, evil, call it what you will, had been referred to as "Aesma of the bloody club". The Professor had gone on to say that in our own day the epithet could be substituted for "Aesma of the summary trial and the firing squad". After the lecture, when it came to questions, Ardeshir had twice raised his arm but he somehow never caught the speaker's eye. All he had wanted to ask the American Professor was why he had not mentioned the *aesma* of the Savak torture chambers ?

He walked back. There was no point in walking further to the Lodhi Gardens, he thought, when with each step the mind was getting more agitated. An evening stroll was supposed to bring you peace of mind. Instead all kinds of thoughts were running across his mind, helter skelter. He walked back vaguely aware of two iceberg-fears trying to surface into his consciousness. The first was his dread of confronting Firoza on the subject of Arnavaz The second was the dread of living with his self-contempt if Arnavaz

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did marry Anwar. Even as the names ran across his mind he became aware that they sounded like two bells forged in the same smithy. God seemed to have made them for one another, connecting the names by assonantal chimes. But no, this couldn't happen; not to him, nor to his daughter with that flawless face of hers unmarked by either a mole or a pimple, and with a voice that sounded like a cello. This much he was certain of. If he could not stop this marriage he would despise himself till his dying day. An old age given up to cultivating self-contempt as you nurture an orchid, he reflected wryly.

The next week was given over to the planning of his strategy. She has only to be told about the quandary the community finds itself in. A community of just over a hundred thousand people, diminishing by ten thousand every decade. A casualty rate of a thousand a year, caused by celibacy, late marriages, sterility, inbreeding. And this was not happening to some head-hunters in Papua New Guinea or some rickets-afflicted tribe in the jungles of the Amazon. The remnants of one of the oldest civilizations were slowly dying without as much as a whimper. The spawn of the Magi, the practioners of the fire-cult just embering away into nothingness like a cigar-stub. He had only to put this into the right words and he was sure it would stoke the fires of her imagination. It would instil a sense of belonging in her. And the saga of their defeat, how within three decades of their having reached the gates of Constantinople the Persians tasted defeat at their own door. And the conversions, that would surely fire her with vengeance against the conquerors.

He waited for the right day to broach the subject. The right day somehow never seemed to come. Strange as it may sound, no scrap of conversation ever led to Yazdegard, the seventh century Parsee king who lost to the Arabs! After the wife and the daughter had gone to sleep, Ardeshir would start his agitated walk up and down the enclosed veranda, thinking of ways and means to shore up the crumbling dyke of Zoroastrianism. Up and down he would go, his loose pyjamas making a swishing sound, his eyes luminous with the night-traffic of thoughts flitting past, his hands gesticulating and his lips mumbling in perpetual dialogue with his gestures.

Eventually he took a day's leave. That was the only way he simply would have to talk to her whether on cue or otherwise. Arnavaz was a little surprized to see him still in his pyjamas at breakfast but apart from a momentary raising of the eyebrows there was no other reaction. She put her head down, quietly ate her omelette and walked into her room. A little later he followed her.

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"A time comes when a child..." he cleared his throat here, "a child err must know the history of her race. Racial attitudes, customs, racial memories are all moulded by history." It looked like the start of an essay or a prepared speech to Arnavaz, who, as usual, was reclining on the bed reading a book. Since appearing for her law exams she was doing nothing, just waiting for her results. He plunged in. "Have you any idea what happened to the people of Iran, when they fell to the sword and to Islam ?" Arnavaz was in no mood to oblige him with an answer. She just kept looking at him impassively. "Well you must firstly know that it was all pre-ordained. Yazdegard, the Iranian King, marched his troops to the borders of his kingdom on hearing of the intended Arab invasion. The Arab commander, Mosanna retreated. But a deputation of Muslims arrived and was summoned by the King to his presence. To make conversation, Yazdegard asked the Muslims what they called cloaks, whips and sandals in their language. The reply was *burd*, *saut* and *n'al*. The sound of the words was so ominous, for they bore a close resemblance to the Persian words for taking (*burdan*), burning (*sukhtan*) and lamenting (*nalidan*) that the courtiers visibly paled. On being further questioned the leader of the deputation offered the King a choice between conversion to Islam or payment of tribute to the Arabs. The Persian King could not keep his cool. Dubbing them as savages he berrated them for the food they took ("serpents and mice are your diet") and criticized them for their sartorial habits ("you have nothing to cover yourself with excepting the wool of camels and sheep")." "Of all the world's nations", he told them, "you are the scurviest, the poorest, the most ignorant, the most estranged from the arts. The dissensions in Persia must have really emboldened you to think of conquering us !" A little loftily Yazdegard offered to give them food and raiment in case "misery and want have driven you from your deserts." But the Arab leader was adamant. The choice before the King lay between accepting Islam or paying tribute. In anger, Yazdegard ordered a sack full of earth to be brought and had it loaded on the shoulders of the leader, saying "This is all the tribute that you will get from me. Inform your general that Rustom (the Persian General) will shortly bury the entire Arab army at Kadesia". But the leader, a man called Asim Amin, willingly bore the burden and departed. When Rustom, the Persian General (no relation of the legendary Palladin) returned, he sensed the symbolic import of having handed over the earth of Persia to the Arab. He sent men in pursuit but the Muslims had crossed the borders. Amin appeared before his General and flung the sack of

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earth triumphantly in front of him shouting "the Persian soil is ours !"

But at the battle of Kadasia it was not the Arabs who were buried, but the Persian corpses which were left to the birds after many days of fighting, the issue of the battle having been decided eventually by the veering of the wind, the dust blinding the Persian hosts.

Yazdegard regrouped his forces, and the battle of Nahavand decided the fate of an empire. The Muslim troops were stirred to their depths by a call from their General, Noman who said "Friends ! Get ready for conquest or martyrdom ! I will sound the *tukbeer** three times. At the first call you will gird your loins, at the second mount your horses and at the third point your spears towards the enemy and rush towards victory or paradise ! As for me", said Noman ecstatically, "I will die a martyr". And he did die on the field, but the Arabs won the battle. After that a hundred thousand people were converted everyday. "Do you realize my daughter ! With a sword in one hand and the Holy Book in the other the Arab hosts went around the country offering death or conversion".

No homily was necessary, thought Ardeshir. If she still did not get the message, the less said the better. He got up fatigued, his entire strength drained out of him. Even as he pushed back his chair it struck him, inexplicably, that old age had come upon him at this moment. He could feel it that instant, both in his psyche and in his bones, as if through a flash of apprehension. Yes, he realized, the earlier he was prepared for an old age, black and brittle as charcoal, the better for him. Yet such is the duplicity of human nature that even as he moved off Ardeshir found himself rummaging in the dregs of satisfaction. He hadn't railed against anybody, hadn't embittered his mouth by the use of wanton expletives, had not succumbed to the exhileration of hatred. He had placed the facts before Arnavaz as he had found them, and perhaps in the process, opened up a new vista for her. And that was that. He could do no more.

Half an hour later Arnavaz left the house, hailed a cab, got down at the Grindlays Bank and walked into Anwar's office, taking care to bolt the door behind her. She told him clearly that if they were to get married it had to be today. It was not as if they had not discussed matrimony earlier.

* *tukbeer* : "God is great", the Muslim battlecry

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"Calm yourself" said Anwar, "Relax. Let me get you a cold drink and a sandwich. But for God's sake calm yourself !"

But she was adament. "I am perfectly normal ! I am absolutely calm ! What is more I am fully in possession of my faculties ! But we either get married today or never !"

There was an argument. "I *told* you I have to soften up my parents ! After all they are not going to take kindly to this ! But you can think only of yourself. Why can't we wait for a few more days ? Why the damned hurry ?"

"Today or never" she said, and he noticed her eyes turning into hard bits of quartz. He gave up. After that it was one hell of a scramble, phoning up a few friends, rushing to a mosque in Old Delhi and making a bushy-bearded Maulvi to agree to act as the Qazi and perform the ceremony, booking deluxe suite in a hotel —he did not want to face an enraged father-in-law at his door— and booking a flight for Srinagar the next day. In between numerous telephone calls he asked her "I hope you've brought a sari ! Surely you don't mean to get married in this," he pointed almost accusingly at the midi she was wearing. Arnavaz assured him that she had taken care to put half a dozen saris in her bag. They moved to the hotel where the Qazi had agreed to perform the *nikah*.* As he was getting down from the car he asked her rather casually, "I hope you have thought of a name."

"Name."

"Just symbolic, darling, but you will need another name after marriage, a Muslim name. Surely you understand that."

Suddenly her eyes filled and she had to make an effort to hold back her tears. "But what is wrong with Arnavaz ? It's a Persian name."

"Nothing's wrong with Arnavaz. It's a lovely name and you will always be Arnavaz to me, darling. But the Qazi will want another name immediately after the conversion ceremony. What do you think of Ayesha?"

She somehow felt that he had thought of the name earlier. It had not occurred to him at the spur of the moment.

The ceremonies were over in a trice. The hallow-cheeked Qazi was brisk. He read the Fatihah (the first chapter of the Quran) and the *durud*, or blessing and ran through the *kalimah*, or creed ("there is no Deity but God, and Muhammad is the Prophet of God"). Then he raised his hands and intoned "O great God !

* *nikah* : wedding ceremony

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Grant that mutaul love way reign between this couple, as it existed between Adam and Eve, Abraham and Sarah, Joseph and Zulekha, Moses and Zipporah, Muhammad and Ayesha, Ali and Fatimah". Anwar's friends embraced him. She had not had the presence of mind to have asked one of her friends to be present.

At eight in the evening she phoned up her mother and with a catch in her voice told her all that had happened as briefly, and hence as mercifully, as possible. "Don't wait for me Mummy", she said, and put down the phone. Numbed as she was, Firoza had noticed the catch in the throat as if a deep draught of air had suddenly been sucked in, though the voice, as always, had come over clear and deep.

There were sudden confabulations with a handful of friends, a call or two to Bombay to convey the devastating news and they decided to wait. Just burrow in and wait for better sense to dawn on the couple so that they would return early from Srinagar to enable the parents to at least hold a formal reception. Surely that would be more graceful than an elopement.

For two days Ardeshir sat indoors. The noise of the traffic streaming past the Purana Quila filtered into his mind, an insidious patch work of sound that at times blotted out everything else. On the third day the desire for company and for a long walk became overwhelming. He had felt claustrophobic. His mind was fit to burst with those long streamers of thought all falling into place. Like the coils of some mythical, endless serpent settling in for the night. He did not notice the pigeons roosting on the mausoleum domes of the Old Fort. But he could not help noting the candles being lit at the graves with which the sidewalk was studded. The word "traducian" somehow kept elbowing into his mind but the meaning eluded him. He recalled having read an article on traducians but could not recollect a thing at the moment.

"A dying race" he said to himself aloud, "a dying race". If only she had paid heed to the fact that Parsees were declining at the rate of a thousand a year. At this rate of statistical decline one could give them another eighty five years. And then they could join the ancient Romans and the Egyptians and find a nook for themselves in the mummy-wraps of history. He started talking to himself aloud. His thoughts, his passions were too strong to be quarantined in the mind any longer. He found himself unequal to wrestle with and dam the flow and feeling of his now desparate interior world.

He found his attention drawn to the triple domed mosque nestling in a plant nursery. He recalled that the signboard here

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once read "All Kind Plants Sold Here", till some spoil sport had corrected it and inserted 'of' between the words 'Kind' and 'Plants'. He saw a variety of flame-tipped crotons in flower pots covering the entire range from rust to russet. Adjacent to the mosque, on the sidewalk, a taxi stand had come up around the grave of a Muslim saint. A few burly Sardars were sitting on folding chairs, playing cards. But they took care to keep the grave covered with marigolds. One of them was lighting a candle in a crypt carved out in the headstone of the grave. A momentary peace descended on him at the sight of the candles being lit. He walked back as dusk set in, his meditation darkening to melancholy.

On his return he looked up the dictionary for 'traducian' and found it meant one who believes that children receive the soul as well as the body from their parents through natural generation. Well, she certainly did not receive my soul, he said to himself emphatically. The earlier I forget about the traducians the better. I am damned if I am going to add guilt to my existing woes, he thought.

His domestic, Shyam Singh came in to bolt the windows and secure the fastenings. And suddenly it occurred to Ardeshir that all this was hardly any use. Whatever evil had to enter his house had already got in. He corrected himself. It was innocence which had flown out. But didn't that mean the same thing, the entry of evil and the exit of innocence.

"Shyam Singh" he said, "let us get some fresh air. Leave the windows as they are. The same goes for the fastenings. Go and relax. Who is going to waste a night trying to rob an old couple."

Shyam Singh laughed a little uncertainly, not knowing how to respond.

"Go home, go home" said Ardeshir, "the world cannot rob me of anything further now ! It has done its damnest already." What did an unlatched door or a window left open matter when a new vista was opening up in front of him, melancholic and bitter to be sure, but a vista nonetheless, a gateway to the vast history of human loss, stretching back perhaps to Eden ? Relaxing on his arm-chair in the veranda he found the frail silhouette of Arnavaz adrift on his memories. And a yearning for his daughter gripped him, for her translucent, porcelain-smooth face and her voice, deep-throated as a cello.

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'The Tourists'

Ganga Prasad Vimal

We were tourists in that city. We would be on the move throughout the day and return to our hotel at night after dinner in some restaurant.

It was the evening of some festival day. We had been in the midst of local crowds in shops and restaurants the whole day. People were in a festive mood and in the evening came out with their families in their lovely dresses, without realizing we foreigners also participated in the festivities. My wife and children were unusually excited.

I was dying for a cup of tea. But all along the roads where we had been moving there were no bars. People were carrying big colourful boxes : attractive gifts for friends or children. At the sight of the toys my daughter stubbornly declared that she would buy a toy. However, in the crowded shops she could not decide what to buy. Suddenly, she noticed an icon of Jesus Christ in the hands of a man who was selling his wares on the pavement. Promptly she bought the icon.

She felt happy and excited and kissed the icon now and then. My son was indifferent to such things. He was interested in history and had by that time, visited almost all the museums and places of historical importance.

Suddenly from the far end of the road, people in festive mood were approaching us like a current. They were dancing and each dancing group had its own troupe playing musical instruments. They were playing very fast but dignified tunes. They were followed by a whole caravan of cars and trucks.

I was wanting to go across the road to a tea-shop after those people were gone. When we reached there, all the chairs were

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occupied. In fact, some people were awaiting their turn, holding their coats in their hands. When my daughter again kissed the icon of Jesus, an old man from the crowd standing behind us came forward. Extending his hand towards her he spoke to her affectionately in Greek : "Good day ! You're an Indian aren't you ?"

Instead of my daughter I replied : "The girl can speak only English." And then the old man at once started talking in English. He was not the first foreigner to start talking about Hindu culture. In that European city, we had encountered a large number of such people. Heaven knows what curiosity provoked them; often they would detain us for several hours and go on apologizing.

"Do you know anything about Jesus Christ ?" the old man asked. The girl nodded her head.

While leaving, the old man put a beautiful gift in the hand of my daughter. "Don't show it to anyone," he said with a smile. It was a small watch on a chain to be worn around the neck.

"Why don't we sit in a park ?" my son suggested. My wife knew at once that he was tired. The boy said, "we shall probably get tea there. Or we may at least get something to eat."

We had been on our feet since morning. It was evening now. A few clouds floated across the sky. That winter evening was pretty cold. It had already started drizzling in the northern districts of Greece. On one side of that region of the capital were dry mountain ranges and on the other the Mediterranean Sea. Cold was at its highest point. Had it been some other day, people would have lazed around in their heated houses. But it was a festival day. There were quite big crowds even in the parks.

We went to an ancient park of Athens. Right before the park was an old church in a dilapidated state. My son was very happy to see that. After seeing the ruins of the Acropolis it was the first time I had seen him so excited.

We had hardly settled ourselves on a bench when an elderly Greek gentleman came and stood near us, with his muffler hanging down his neck.

"May I sit at one end of the bench ?" he asked in an apologetic tone. "You would be no doubt inconvenienced. But all the benches in the park are occupied. And I have no heart to go to the benches occupied by young couples. It is even sinful to look at the way in which they are celebrating a big day." Even in that cold his glistening face created an illusion of sweat.

"Please, make yourself comfortable," my wife replied. Then to dispel his feeling of hesitation she added : "we would be very happy to have the company of a stranger. Please sit."

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He sat down. For a while he went on shifting his position and then turned his face away. I felt that probably out of embarrassment he was keeping himself aloof from us. But that could not be. Both my children are terribly talkative. They sat silent for a few moments. Then my son suddenly started saying, "Excuse me Uncle, can you tell me something about this Church ? I have seen most of your churches, but this church looks a little odd to me."

"Odd ? Why ?" he was amazed.

"Its dome looks familiar." He gave the boy a stunned look.

"Amazing !" he said. Then turned to look at us. Without waiting for a moment he asked the boy : "How old are you ?"

"Eleven years."

"And do you know what you're asking me ? This church has been built by those descendants of Alexandar the Great who returned from India. Very few people can notice such a minute thing." He got up and very respectfully bowed to the boy.

Suddenly he became an object of curiosity to us. "You're a Greek yourself, aren't you ?"

"Cent per cent Greek, a descendant of Alexander the Great," he said with a laugh. "When we have nothing in the present, we live in the glory of the past." He became very sad. In that glow of the multi-coloured lights of the park we noticed a dejected expression on his fair, elongated face. He said : "Now we're reduced to being a poor country. We're so much withdrawn into our own land that at times I fear that we may just become an island."

"But there's prosperity here," my wife observed. "People are happy, the shops are all full !"

"Happy..." the man broke into an ironical laugh. "Only those people are happy who can accept the present economic system—a handful of people. You've probably not observed that our country is now no more than the southern entrance to Europe. Anyone can come here and get in without difficulty. Military posts..." Suddenly he was silent. "Forgive me," he said again. "You are foreigners here. What's the point of narrating our state of affairs to you ? But it's only in the context of this country that you can understand the conditions prevailing in the Western world."

The conversation had now taken a serious turn. I pulled out a few packets of spaghetti and offered one to him.

"Oh, no !" and in response to my gesture he looked into his own bag and pulled out a bottle of exquisite wine.

"Please have this. It's a gift from me for today's festival."

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It was impossible not to accept that affectionate gesture. My wife pulled out a pair of Indian bangles from her handbag and extending them to the man said : "This is a gift from us for your wife."

He did not extend his hands to accept the gift. "Wife..." was his only brief response.

We looked at him agog, wondering what the matter could be.

"Dear lady," he said to my wife. "I do have a wife but she has left me. You know very well that the institution of marriage is on the rocks in the West. My two children—they are grown up now. The boy must be living out of wedlock with some girl. The daughter is still young. She is studying in a school of orphans and ruffians. My wife would never be satisfied with one man. I know she would have changed many houses."

I was searching for words to express my reaction. "I'm sorry to hear that," I suddenly said.

"Oh ! Actually I should feel sorry that our civilization has reached a point when it has no future at all."

"You're too much of an alarmist," I said. "In course of time, everything will fall into place."

Its present pattern is encouraging crime, and unscrupulousness," he remarked with some agitation. "Any community with an unsound moral basis..." he said with an ironical smile.

"You're disregarding your progress," I said to please him. "In Greece you have such a large naval fleet; you've science, art..." But he was not pleased. He said : "Go a little westward and you will find that Greece is just a village. Greece is merely a relic of the past. These days..." Then he looked at my wife and said respectfully : "look at the dignified expression on her face—where can you find it among our women with their craving for independence ? They have become just like the remnants of a pleasure-loving civilization." "But why did your wife leave you ?"

He mellowed a little when my wife asked him that question. He replied in an extremely soft tone : "Well, she too was bitten by the bug of freedom. And how much difference is there between freedom and anarchy ?"

"Does she never meet you ?"

"Quite often."

"Doesn't she repent ?"

"That's left only for me. My wife, in the pride of her feminine charms, has gone to the extremes of wantonness. And such a thing hasn't happened in our family alone. My parents too were divorced after a brief period of togetherness. I myself was brought

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up like an orphan....Now most of our children are compelled to live like orphans or illegitimate offsprings.

"But I have heard that in Greece people are devoted to culture and believe in the sanctity of marriage."

"There are very few such people." Then he pulled out a Greek newspaper. "This paper publishes a list of divorces. In one month...,' he started counting. That newspaper had a picture of the communist party flag printed in one place.

"Are you a communist ?"

He kept quiet.

"Whatever it is, yours is a beautiful country," I remarked in a praising tone.

Our children got up and stood under a tree. "I am very happy to see you people. I keep reading a lot about India."

I looked at him with gratitude. He asked : "How long have you been married ?"

"Sixteen years."

Suddenly he sprang to his feet saying : "I completely forgo that I had to give gifts to the orphan children today. Excuse me... but my friend, do give me your address."

In turn, he also put his visiting card in my hand. Then he said : "May these children grow well and progress in life. I am wishing you well in front of this church with God as a witness... My friend, always promote human values...human qualities." And he kissed my hands. Then he waved at the children and vanished. He made such a swift dash that my wife even forgot to give him some gift.

After he went, even though we were four, it was as if we were left alone.

I wondered to whom I could narrate the situation in India; so far was the reality from the rosy pictures painted in our books. When I meet someone from Greece again, I shall tell him about the real India.

We picked up our bags. We were feeling like tired tourists.

Translated by SARALA JAG MOHAN

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Book Reviews

Indian Journals and Essays, E.M. Forster : Arnold-Heinemann, Delhi, 1984 ; 232 pp; Rs. 50

Any new book on E. M. Forster is news in India, and when the new book claims to contain "unpublished writings (by him) directly related to his three journeys to India" it is likely to be big news and to excite the curiosity of all lovers of his novels and criticism. Their number is perhaps not statistically so large, but it is impressive both by being spread over all ages—the old, the middle-aged and the young—and by existing in every part of India in which the English language and its literature are known, spoken and read with ease and by instinct.

The present volume is therefore most welcome, though it is sometimes rather carelessly put together. For instance, its listed Contents include illustrations, that do not appear at all. It omits to mention in its front blurb that the excellent choice and arrangement of material, as well as the editing, and including six valuable appendices, is the work of Elizabeth Heine, to whom we owe 'The Abinger Edition 14'. The Acknowledgement states that "this book has been first published by Edward Arnold Publishers Limited, London, as Part II of the Abinger Edition of E.M. Forster's *The Hill of Devi And Other Indian Writings.* As a special arrangement with Edward Arnold we have been granted permission to reproduce this book separately. "The illustrations, referred to earlier, seem to have appeared in *The Hill of Devi And Other Indian Writings*," but to have been dropped, without explanation, from the volume under review.

This carelessness notwith-

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standing, the book contains material published for the first time in India "between boards", that will delight all Forster's admirers and will explain to students of his work what he intended when he wrote his novels and how he himself estimated them once they were published. It also supplies the inspiration and nucleus of his Indian experience that developed into *A Passage to India* and *The Hill of Devi*.

The first part of the book carries Forster's *Indian Journal : 1912-1913*, that includes entries from his diary and letters written at this period, with the slight but pleasing lecture that he gave on "The Enjoyment of English Literature." The remainder of the book deals with broadcasts made in England and India from 1940 onwards, his *Indian Journal : 1945* : six appendices, which contain *inter alia* a fragment of his novelette *Kanaya* (of which more hereafter) and letters written to his mother and his friends in England during his Indian visit in 1921. Perhaps most valuable to the student of Forster's novels is *Three Countries*, a paper read in Milan and Rome in November 1959, that tells us what Italy, England and India have respectively contributed to the making of the man and writer.

When Forster first came to India in 1912, he was already a writer of some distinction, for he had published *Where Angels Fear to Tread*, and *A Room with a View*, *The Longest Journey* and *Howards End*. In short, the only celebrated novel by him that he had not yet written was *A Passage to India*. Despite his journal and the numerous letters he wrote home between 1912 and 1913, his projected novel on India made little progress. As he says, it "stuck." Then, on his second visit in 1921, and despite the eloquent and traumatic years between 1913 and 1921, or perhaps because of them, he was able "to connect." The entries in his journal and the letters do much to establish and explain the process of connection and creative release. The writing has not changed, nor indeed has the man. The material written in 1921 is substantially in the same tone of voice, has the same fastidiousness, the same deeply civilized reaction to people and events, the same gentle insistence on the need for sensitivity in personal relations and integrity as the entries and letters of 1912. We get precisely the same impression of a gentle, mature, civilized writer, frequently quiet in company, more intent on seeing old architecture and painting, and listening to music than on meeting new and important people. He is clearly aware of political developments, but it is the nuance in men's conversation and attitudes that appears to interest him more

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than the political situation. This volume has no index, but it does not seem to me that the names of the Indian National Congress or its leaders occur with any frequency. There are political comments without, however, any special evidence of political acumen. Few writers can have so successfully absorbed the social atmosphere of Anglo-Indian relations in the first two decades of the 20th century and have remained so publicly inarticulate on what was politically relevant or important for the times. This notwithstanding, there is evidence of a subtle perception of what in general was going on. Thus : "Hubback is here in the Civil Service, and I think a little worried that I am staying with an Indian. I stopped with an incredible schoolmaster at Benares, so kind, but whatever I wanted to do, he told me it wasn't done and whatever I said, he replied archly, 'Oh, but that's seditious.' " And, "For the last six weeks, I have been in British India, hearing more politics and business talk than I am capable of understanding and passing to and fro between the Indian camp and the Anglo-Indian. There is much bitterness in either, which has been increased by the Commission (Islington, to consider opening the high civil service to Indians) ; each party has been invited to hold forth on the faults of the other. Indians complain that the enquiry will only result in an increase of pay for the officials, Anglo-Indians that it means further jobs for Indians, whatever the evidence offered, but I suppose the result really depends on what government is in power when the report is submitted."

A Passage to India appeared in 1924. It is easy to see now with the materials at our disposal in this book and in *The Hill of Devi* how its tapestry was woven from the threads of experience in 1912-13, emotion recollected in tranquillity between 1914 and 1920 and the fresh experiences of 1921. In his revealing talk entitled *Three Countries*, Forster says : "My connection with India is peculiar and personal. It started because I made friends with an Indian and but for him I might never have gone to his country or written about it. His name was Masood—he was a Moslem—who had come over to go to Oxford; we saw a great deal of each other and travelled in Italy and France, and when he returned to India, it was agreed that I should go to stay with him. This I did in 1912 and twelve years later when *A Passage to India* came out I dedicated it to him."

He then records that he saw a good deal of his own countrymen in India (Malcolm Darling was the most important influence) and he had another friend, the

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Maharajah of Dewas Senior, who was a Hindu. To this, he adds what every student of the *Passage to India* needs to inwardly digest : "The book is not really about politics, it's about something wider...about the search of the human race for a more lasting home, about the universe as embodied in the Indian earth and the Indian sky, about the horror lurking in the Marabar Caves and the release symbolized by the birth of Krishna..."

Why is it that Indians still weaken so much to Forster, though there are Indians, notably, Mr. Nirad Chaudhuri, who proclaim their antipathy towards Aziz, and their scorn for the *Passage to India* ? Because Forster understood India at first, second and third sight. Perhaps he was helped to do so by the friends to whom he owed his knowledge of India and her people—Masood, Malcolm Darling (and his wife, Josie) and Dewas Senior. But he did so in 1924 when few Englishmen saw India fairly or sympathetically. Also, because Forster had the gift of empathy. Without necessarily agreeing with people of other races and nationalities or accepting them at their own valuation, he could see how they felt about their unenviable and not-always-easily resolvable situations. Of this instinctive sympathy for India and Indians, there are several instances in this book, and it is not unnatural that an Indian reader should be warmed by them. Thus, in *Indian Journal : 1945*, in a letter from Delhi to his friend, Jack Sprott, he says : "Dear me I love this country though I don't know why or how." What better reason could there be for loving a country than one's instinct ? In his broadcast over the BBC in 1940 on *The Individual and His God*, Forster praises an Indian Exhibition organized by Stella Kramrisch in London during World War II, for the light it throws on the meaning of the Hindu Temple. He adds : "...and it was with relief and joy that I saw these great temples where the individual is at the last resort alone with his God". Of Santiniketan in 1945 he writes : "It really is an agreeable place, and the Great Spirit was referred to by his disciples quite sensibly...Yes, yes India is changing." He understands the Muslim mind, as he does Muslim ceremonies, better than their Hindu counterparts, but he is always willing to learn about both cultures, for he has all the humility of the genuine artist. The artist's job, he says in a broadcast from Delhi in 1945, is "to listen more carefully than most people, and to use his ears with detachment and with passion." Towards the end of this *Journal*, and remembering his mother

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who had recently died, he exclaims : "O lovely world, teach others to expound you as I have not been able to do ! O untroubled spaces, seldom looked upon by men's eyes and unmarked by their activities ! These clouds over the Mediterranean which will keep moving when I have passed, those deserts in Arabia which I flew over coming out, and again the other night in the dark, you remain pure and unconquered, and the imagination of others will conquer you !" So the last word is one of creative humility.

Since his death in 1970, the world has known, partly through P. N. Furbank's excellent biography, but also through Forster's novel *Maurice*, and now the fragment *Kanaya* (referred to earlier in this review) of Forster's homosexuality, and the part it played in his life and writing. *Kanaya* is a not uninteresting reflection of this 'perversion'. Forster made a clean breast of it to the Maharajah of Dewas Senior, who was truly his friend, who detested homosexuality but liked Forster, and was willing to screen him from public taunt and cater discreetly to his physical needs. With a knowledge of Forster's idiosyncracy, we now read his work, his letters, his diaries with a much fuller understanding. We may debate the question of whether his homosexuality enhanced the quality of either the man or his writing, but it does explain *The Longest Journey* and Forster's reiterated horror of respectability.

Those who have immersed themselves in his work over the years will find few surprises in this volume, for the man is inseparable from the novelist and critic. We may move freely from private journal to public novel, from novel to journal, without any sense of being jogged or of travelling over unexpected territory. What these materials do supply is confirmation of everything that we have known intuitively from Forster's creative and critical work of what he felt about India, and the writer's task in using her to say what he had to say. The private journal and the private letter speak the same language as the public lecture or broadcast through the years : the tone of voice is uniquely Forster's, gentle and civilized but steadfastly committed to the demands of the inner life.

MURIEL WASI

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Life Signs, Jayanta Mahapatra : Oxford University Press, Delhi, 1983, pp 48, Rs. 25

Reading Jayanta Mahapatra's *Life Signs* is like visiting a small old city at the bank of a river where timeless temple bells ring in intimations of mortality. Conspicuously absent from the poems is the metropolitan horror of men getting crushed under speeding wheels, riots, rush hour traffic jams, frayed temper and sardonic humour. Yet central to almost all the poems is the modern motif of death in life. The poet says in "Violence",

So we drag the meanings
from what we see.
(p. 5)

and what we seen "day after day" is "the drunk sea" spitting out "shells", or "rainwater" slashing streets while a "child whimpers", or a river running down "into the meaningless valley".

The poems invariably have low key openings, but end on a reflective note. Thematically they fall in three major groups :

a. We have poems about the ennui of man caught in his mundane routine as in "The Wound",

When in the dawn's terrible hour
we awake, weary
of the last thrust of blood in the night
touched by the fear that leaped out the dark
do we dare ask of one another those questions
that go on searching
the secret places of the soul ?
Do we open ourselves, fully, ever,
for the moments of love and death
to echo off *the* hidden wound in the darkness?
(p. 3)

b. There are poems about encounters with prostitutes, of which "Man of His Night" is an example,

He rubs his eyes with a corner of his handkerchief
that is smeared with the dark of impossible nights,
hoping his sight will clear.
The wet road on his mind
is blotched with the blood of neon.
The plump whore he has just left
has brazenly gone to work on a new customer.
(p. 18)

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c. There are poems about father-son, son-father relationship. The title poem, "Life Signs" falls in this group,

> What's in my father's house
> is not mine. In his eyes,
> dirty and heavy as rainwater
> flowing into earth, is the ridicule
> my indifference quietly left behind...
>
> (p. 12)

Since the thematic range in the volume is fairly narrow, poems which are striking on reading individually take on an air of *déjà vu* by the time the book ends. The compulsive reflective note, too, hardens into a near posture. The danger of such a posture, however, is that it can lead to a lot of factitious beginnings,over-ingenious metaphors and apterous poetry :

> In a hut a six-month-old child awakens
> and crawls across the dung washed floor
> not asking where he goes.
> It is evening, there is light laughter
>
> ("Evening Landscape by the River", p. 2)

There are numerous such bald lines. The intensity of the poem consequently is diminished for gratuitious detail draws attention to itself :

> Today I saunter
> in the fields of desolate rice.
> Thus I turn to face my life.
> An old woman's voice trembles
> as it seeks the lost rootholds of the May air.
> But I do not wish to hear what she is about to say.
>
> ("In the Fields of Desolate Rise", p. 48)

or,

> my father's voice
> echoing wearily from bone to bone,
> comes to rest
> on my eye like a speck of mould.
>
> ("Life Signs", p. 12)

Voice resting on *eyes* like a speck of *mould* is a bit hard on the imagination.

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The most successful in the volume are the longer poems—"The Quality of Ruins", "Grandfather", "A Monsoon Day Fable", "Will a Poem of Mine be the Only Answer" and "The Lost Children of America"—the last being a Mahapatra vintage :

In the Hanuman Temple last night
the priest's pomaded jean-clad son
raped the squint-eyed fourteen-year fishergirl
on the cracked stone platform behind the shrine
and this morning

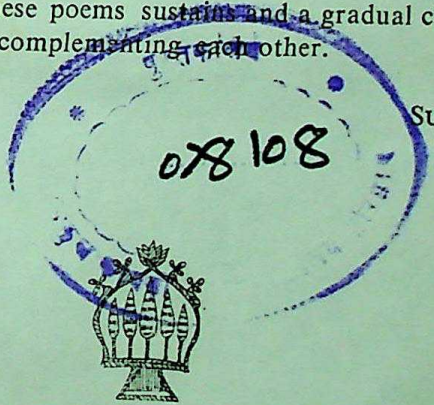
her father found her at the police station
assaulted over and over again by four policemen
dripping of darkness and the scarlet death.

In this time of darknesses the lost ones and I
will dim like lamps and go back to the moments
we caught once in the uncertain light of dawns;
to balance ourselves in falsehood,
in the colour of dead leaves on earth,
falling upon the unreal world of simile and metaphor
glorying in hyperbole
as we wait to be allowed our manner of quieter joy,
and silencing the world with borrowed voices
of the dead that sing homage to clay
in crippling ennui :
echoes of an isolating idolatry.

("The Lost Children of America", p. 26)

The mood in all these poems sustains and a gradual crescendo is built through images complementing each other.

SUNITA JAIN



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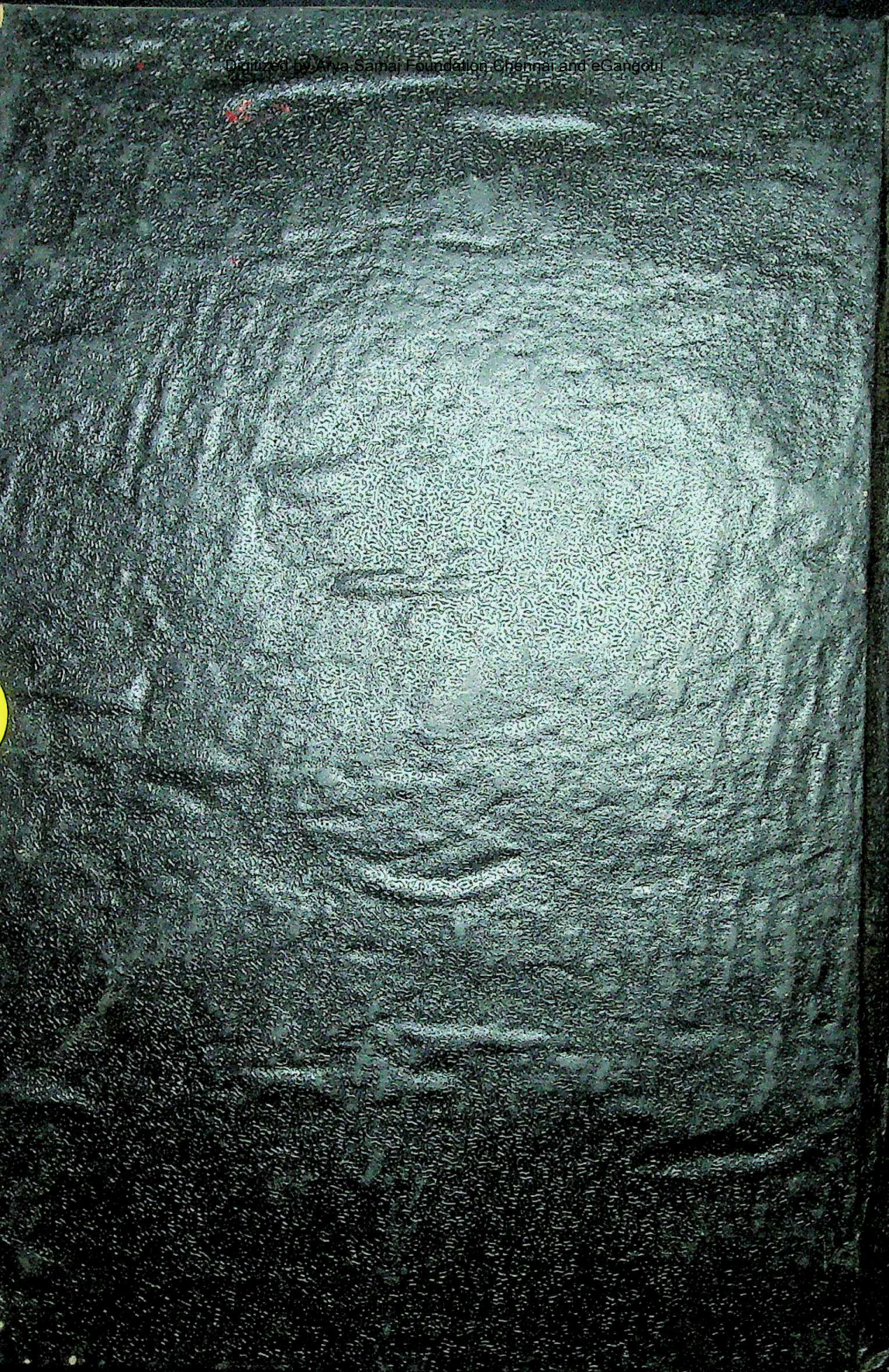
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